WORKING CAPITAL MANAGEMENT AND ITS IMPACT ON SMU'S PERFORMANCE

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INTRODUCTION

Small Manufacturing Units (SMUs) play an important role in the development of the country. However, these industries face difficulty in accessing adequate finance for their businesses. Apart from the traditional modes of financing like banks and money lenders, newer sources of financing such as venture capital investment, can take care of their financing requirements. In the case of India, the government has taken several initiatives both at the national and the international levels to improve the availability of finance. But there are still certain impediments that the SMUs face that are required to be addressed by the government. SMUs encourage entrepreneurial development and dispersal of the industries throughout the length and breadth of the country. It also generates a lot of employment opportunities and the capital cost per employee is very minimum. With the service sector contributing a major share to the GDP and as this sector relies on the SMUs, the scope for SME finance by the commercial banks has increased tremendously. The government is also committed to give a fillip to the sector through infrastructural development, skill developmental effort, technological up gradation and by expanding the role of Small Industries Development Bank of India in SME development.

The SMU sector has become very important for many economic activities in developing countries because of its special features of capital sparing and labor intensiveness. In fact, the small and tiny sectors have a major role to play in developing nations which suffer due to low capital formation and over population Govt. of India took several measures for the promotion and smooth functioning of this sector. Besides these, Government of India carefully planned the development of small and tiny industrial sectors in the country. It has spent millions of rupees for their development during the plan periods. But to the dissatisfaction of many, including Government agencies, the sector has not been working well owing to different problems faced by them both at the promotional and operating stages. Hence an effort to fill gap of study relating to use of working capital in post liberalization is undertaken.

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RESEARCH METHODOLOGY

Objectives of the Study

1. To examine the combined effect of the ratios relating to working capital management at Small Manufacturing Units (SMUs)

2. To determined the working capital leverage for examining the sensitivity of ROI to changes in the level of gross working capital of Small Manufacturing Units (SMU).

3. To compare the liquidity position of the Small Manufacturing Units (SMU) in Aurangabad District.

4. To know the working capital requirements of Small Manufacturing Units (SMU)

5. To give suggestions to improve the efficiency of working capital and liquidity management of small Manufacturing Units (SMU) in Aurangabad

6. To study the post liberalization problems of Small Manufacturing Units (SMU) and to suggest some remedies to overcome them.

Hypotheses

1. There is a definite inverse relationship between the degree of risk & profitability

2. Risk can be minimized by maintaining a higher level of current assets or working capital

3. Firms, which adequately plan its cash, inventory and sundry debtors have fewer problems of control than one, which operates without effective policies in these areas.

4. Increase in the ratio of current assets to total assets results in decline of the profitability of the firm.

5. Decrease in the ratio of current assets increases the Profitability of the firm because of investment in fixed assets.

6. Inefficient Management of Working capital leads to sickness.

Type of research and Sample Size: The type of research is analytical and the sample size is 100 Small Manufacturing Units is selected for study purpose by stratified random sampling methods.

Tools and techniques to be used: For the purpose of analyzing the data and in depth research analysis, the following statistical tools and techniques are used: Ratios Analysis, Mean and standard deviation, Correlation analysis

Period of Study: The period covered is 10 years from 1st April 2005 to 31st March 2015.

REVIEW OF THE LITERATURE

- Falope OI, Ajilore OT, 2009. Working capital management and corporate profitability: evidence from panel data analysis of selected quoted companies in Nigeria. Research Journal of Business Management, 3: 73-84, they used a sample of 50 Nigerian quoted non-financial firms for the period 1996 -2005. Their study utilized panel data econometrics in a pooled regression, where time-series and cross-sectional observations were combined and estimated. They found a significant negative relationship between net operating profitability and the average collection period, inventory turnover in days, average payment period and cash conversion cycle for a sample of fifty Nigerian firms listed on the Nigerian Stock Exchange. Furthermore, they found no significant variations in the effects of working capital management between large and small firms.

- Mathuva D, 2009. The influence of working capital management components on corporate profitability: a survey on Kenyan listed firms. Research Journal of Business Management, 3: 1-11, He examined the influence of working capital management components on corporate profitability by using a sample of 30 firms listed on the Nairobi Stock Exchange (NSE) for the periods 1993 to 2008. He used Pearson and Spearman's correlations, the pooled ordinary least square (OLS), and the fixed effects regression models to conduct data analysis. The key findings of his study were that: i) there exists a highly significant negative relationship between the time it takes for firms to collect cash from their customers (accounts collection period) and profitability, ii) there exists a highly significant positive relationship between the period taken to convert inventories into sales (the inventory conversion period) and profitability, and iii) there exists a highly significant positive relationship between the time it takes the firm to pay its creditors (average payment period) and profitability.

- NAMBIAR, P.C.D. 2007 - "FINANCING for PRIORITY SECTORS" S.B.I MONTHLY REVIEW DEC16, 2007 – The article on the above topic paved the way for the thinking strategy for the financing the small scale and medium scale industries by the bank officers. The government of India through its industrial policy clearly stated that the commercial banks should give priority treatment to the SMUs. The nature of the banking officials also discussed in the article. But that is not sufficient to promote the SME sector because the sector was totally neglected for the last several decades due to invention of the MNCs. By enacting the MSME act, 2006, the government of India clearly indicated the signal to the banking people to provide the credit facilities to the SMUs. This article is very much helpful in preparing the script for my thesis.

- Raheman A, Nasr M, 2007. Working capital management and profitability – case of Pakistani firms. International Review of Business Research Papers, 3: 279-300, they studied the effect of different variables of working capital management including average collection period, inventory turnover in days, average

payment period, cash conversion cycle, and current ratio on the net operating profitability of Pakistani firms. They selected a sample of 94 Pakistani firms listed on Karachi Stock Exchange for a period of six years from 1999 - 2004 and found a strong negative relationship between variables of working capital management and profitability of the firm. They found that as the cash conversion cycle increases, it leads to decreasing profitability of the firm and managers can create a positive value for the shareholders by reducing the cash conversion cycle to a possible minimum level.

- Garcia-Teruel PJ, Martinez-Solano PM, 2007. Effects of working capital management on SME profitability. International Journal of Managerial Finance, 3: 164-177, they collected a panel of 8,872 small to medium-sized enterprises (SMEs) from Spain covering the period 1996 - 2002. They tested the effects of working capital management on SME profitability using the panel data methodology. The results, which are robust to the presence of endogeneity, demonstrated that managers could create value by reducing their inventories and the number of days for which their accounts are outstanding. Moreover, shortening the cash conversion cycle also improves the firm's profitability.

DATA ANALYSIS AND INTERPRETATION

Current Ratios: Current Ratio: It can be observed in Table No.1 that Current Ratio of Small Manufacturing Enterprises varied between 0.94 : 1 and 1.79: 1 during the period from 2005-2016 to 2014-2015. It is evident that, on an average, per every one rupee of current liability, it has been maintained at 0.563 rupee of current assets as a cushion to meet the short-term liabilities. Usually, a Current Ratio of 2:1 is considered to be the standard to indicate sound liquidity position but in the case of the firm under study, it is far below the standard Current Ratio meant for the industry. Hence any fluctuation may lead to shortage leading towards sickness.

Quick Ratio: The Quick Ratio (Table No. 2) of the firm for the study period ranges in between 0.00: 1 to 1.40: 1. Normally, 1:1 is considered to be the standard Quick Ratio. Current Assets minus Inventory are Quick Assets and on an average, it has been maintained at Re. 0.407 for every rupee of quick liabilities. The Current Ratio and Quick Ratio of Small Manufacturing Enterprises reflect that short-term liquidity and solvency is in danger and it of course doubtful how the short-term financial obligation of the firm would be met under such unsound financial position. The combined interpretation of these two ratios reflects that the interest of short-term creditors is not at all protected by inadequate solvency and liquidity of near money assets. This shows while using Working capital units have to be more alert in weeding out wastages and avoid blockage of funds unnecessarily.

Inventory Turnover Ratios: Inventory Turnover Ratio: Inventory Turnover Ratio (Table No. 3) declines from 21.60 to 8.40 times in between 2005-2006 to 2014-2015. It indicates that, on an average, a rupee invested in inventory generates Rs. 3.80 worth

of sales, which is moderately good. But Inventory Turnover Ratio in 2009-2010 is not at all satisfactory in comparison to the earlier years for around 41 companies. However, on overall analysis, it may be opined that inventory management is moderately satisfactory.

Working Capital Turnover Ratios: Working Capital Turnover Ratio: Working Capital Turnover Ratio (Table No. 4) indicates the efficiency of the firm in utilizing the working capital in the business. Working Capital Turnover Ratio has been found to be negative throughout the period under study. It varies between -7.4 times and 8.0 times. This ratio signifies that on an average, a rupee of negative working capital fails to generate Rs. 1.80 worth of business/sales of the firms, which is obviously an alarming situation for the management of the firm. Working Capital Management practices to be strengthened by the firms understudy.

Accounts Receivable Turnover Ratios: Accounts Receivable Turnover Ratio: The Accounts Receivable Turnover Ratio Mean was negative for 13 companies. And good in more than 50 companies and is highest (7.10 times) in 2005-2006 and lowest (2.04 times) in 2009-2010 and average is 4.234 times. Debtors and Receivables management appears to be satisfactory. However, average Debtors Turnover Ratio should be six times or more during a financial year. Simply speaking, more the number of times debtors' turnover, better the liquidity position of the firm. The combined effect of better management of inventory and debtors & receivables has enabled the firm to generate reported business of the firm.

Inventory Period (Days) Ratios: Inventory Period (Days) Ratios: The Inventory Period(Days) Ratio is highest 26.15 in the year 2009-2010 and lowest 22.94 in 2012-2013 and average is 24.83 Days. Inventory Period Days appears to be satisfactory. Simply speaking less the number of Inventory period days, better is the liquidity position of the firm. The combined effect of better management of inventory and debtors & receivables has enabled the firm to generate reported business of the firm.

Account Receivable Period (Days) Ratio: Accounts Receivable Period (Days) Ratios: The Accounts Receivable Period (Days) Ratio is highest 9.33 Days in the year 2009-2010 and lowest 8.13 in 2012-2013 and average is 8.85 Days. Accounts Receivable Period) appears to be satisfactory. Simply speaking less the number of Accounts Receivable Period (Days), better is the liquidity position of the firm. The combined effect of better management of inventory and debtors & receivables has enabled the firm to generate reported business of the firm.

Account Payable Period (Days) Ratio: Account Payable Period (Days) Ratio: The Accounts Payable Period (Days) Ratio is highest 32.89 Days in the year 2009-2010 and lowest 26.05 in 2012-2013 and average is 8.85 Days. Accounts payable Period) appears to be fluctuating in almost all the years. The highest the Account payable period the lowest is the capital required. The Working capital can be used adequately during the same year.

Operating Cycle (Days) Ratio: The Operating Cycle (Days) Ratio is highest 34.91Days in the year 2014-2015 and lowest 31.07 in 2012-2013 and average is 33.78 Days. Operating Cycle (Days) appears to be satisfactory. Simply speaking less the number of Operating Cylce (Days). The combined effect of better management of inventory and debtors & receivables has enabled the firm to generate reported business of the firm.

Liquid Ratios: The Liquid Ratio is highest 0.42 in the year 2014-2015 and lowest 0.27 in 2005-2006 and average is 0.33. Liquid Ratio appears to be satisfactory. Simply speaking more Liquid Ratio means that more chance of adequate capital for meeting day to day expenses of the firm. The better management of Liquid Asset helps firm to generate reported business of the firm.

Gross Profit Ratios: The Gross Profit Ratio is highest 29.78 in the year 2014-2015 and lowest 27.40 in 2005-2006 and average is 28.31. Gross Profit Ratios appears to be satisfactory. Simply speaking more Gross Profit Ratio means that more chance of Net Profit and adequate capital for meeting day to day expenses of the firm. The better management of Firms helps firm to generate more profit.

Net Profit Ratios: The Net Profit Ratio is highest 0.94 in the year 2014-2015 and lowest 0.69 in 2005-2006 and average is 0.79. Net Profit Ratios appears to be satisfactory. Simply speaking more Net Profit Ratio means that more chance adequate capital for meeting day to day expenses of the firm. The better management of Firms helps firm to generate more profit.

Cash Ratio: The Cash Ratio is almost same in the years 2010 to 2015 and the lowest 0.20 in 2006 & 2007. The average is 0.24. Cash Ratios appears unsatisfactory. Simply speaking stagnant Cash Ratio means that there is more chance of firm becoming sick. The stagnant cash ratio shows poor cash management. There is sizeable increase in Net Profit in almost all the years but on the contrary Cash Ratio is stagnant. The firms should focus on better management of Cash for protecting firms from becoming sick.

Operating Profit Ratio: The Operating Profit Ratio is highest 21.28 in 2014-2015 and lowest 0.20 in 2006 & 2007. The average is 19.81. Operating Profit Ratios appears satisfactory. The operating profit ratio shows that the firms had taken measure to control cost of production and other expenses for increasing gross profit and net profit of the firms. Simply speaking stagnant operating profit ratio means that there is more chance of reducing cost of production to increase operating profit. The firms should focus on better management of production activities for increasing operating profit.

CCC Cash Conversion Cycle: The Cash Conversion Cycle is highest 5.45 in the year 2011-2012 and the lowest 2.43 in 2006 - 2007. The average is 3.89. Cash Conversion Cycle appears unsatisfactory. Simply speaking increase in Cash Conversion Cycle Ratio means that the firms need more time to convert their receivables, inventory to

cash. The firms should focus on better management of Cash for protecting firms from facing inadequate cash problems leading to sickness.

Return on Total Assets (ROTA): The Return on Total Assets is highest 0.0402 in the year 2006-2007 and the lowest 0.0328 in 2007-2008. The average is 0.04. Return on Total Assets appears unsatisfactory. Simply speaking there is quite fluctuations in Return on Total Assets. The firms should focus on better management of working capital.

WORKING CAPITAL ANALYSIS

The major components of gross working capital include stocks (raw materials, work-in-progress and finished goods), debtors, cash and bank balances. The composition of working capital depends on a multiple of factors, such as operating level, level of operational efficiency, inventory policies, book debt policies, technology used and nature of the industry. While inter- industry variation is expected to be high, the degree of variation is expected to be low for firms within the industry. Table – 17 gives an analysis of each component of working capital and some interesting trends can be deduced.

Ten Year Means and standard Deviation for the Variables

A comparison of inventory composition of industries over the years shows only slight improvement for the food and paper & packaging industries. It is interesting to note the consistent improvement in trade debtors share of current assets in all the industries and except for the food, it represents less that 30% of total current assets. Thus it can be deduced that the companies have monitored the accounts receivable reasonably well and this could be partly due to their need for generating funds from the operating activities instead of relying from outside funds.

Except for the paper & packaging, the other types of industries have a greater reliance on short-term funds and this is even more in 2009. The prefabricated metal product is financing 85% of its assets out of current liabilities and this over-reliance may be a threat to the industry's survival. In terms of liquidity, all the four industries, Food, Textile & Garments, Metal products, and Auto Components are having less liquid assets to meet their current obligations and if this becomes permanent, it may affect supplies of materials and thus production.

The proportion of liquid assets to total assets is above 70% for the Auto Components and Metal industries, indicating a low fixed assets base. This implies that these two industries can operate with a relatively low investment in fixed assets as compared to the other industries like printing and garments where the production tend to be heavily mechanized. Another plausible reason could be that the Mauritian small manufacturing firms have been more concerned about current operations than about longer term issues like capacity and technology.

TEN YEAR MEANS AND STANDARD DEVIATION FOR THE VARIABLES

SR. No.	Variables		YEAR'S									
			2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
	No. of Years		1	2	3	4	5	6	7	8	9	10
1	Current Ratio (CR)	Mean	1.68	1.70	1.70	1.74	1.77	1.73	1.72	1.75	1.75	1.83
		STD Dev.	0.28	0.29	0.33	0.22	0.23	0.24	0.23	0.23	0.26	0.15
2	Quick Ratio (QR)	Mean	0.60	0.70	0.72	0.74	0.77	0.73	0.72	0.75	0.78	0.83
		STD Dev.	0.29	0.29	0.28	0.22	0.23	0.24	0.23	0.22	0.18	0.15
3	Inventory Turnover Ratio (ITR)	Mean	15.14	15.27	15.27	15.64	15.93	15.60	15.50	15.73	15.79	16.43
		STD Dev.	2.53	2.60	2.95	2.01	2.03	2.19	2.06	2.05	2.30	1.32
4	Working Capital Turnover Ratio (WCTR)	Mean	4.07	4.19	4.22	4.59	4.88	4.55	4.45	4.65	4.71	5.35
		STD Dev.	4.22	4.26	4.54	3.90	3.84	3.85	3.88	3.83	4.04	3.39
5	Account Receivable Turnover Ratio (ARTR)	Mean	17.03	17.46	17.45	19.27	20.74	19.62	18.89	19.67	19.80	23.02
		STD Dev.	21.79	21.92	23.12	20.41	20.26	20.26	21.05	20.20	21.61	18.43
6	Inventory Period (Days)	Mean	25.36	23.72	24.92	25.28	26.15	24.54	25.15	22.94	24.48	25.79
		STD Dev.	8.82	9.64	10.89	9.08	9.31	8.98	9.23	9.14	8.67	9.09
7	Accounts Receivable Period (Days)	Mean	9.06	8.53	8.93	9.05	9.33	8.72	8.94	8.13	8.71	9.12
		STD Dev.	3.91	4.13	4.43	4.29	4.15	3.81	4.10	3.97	3.78	3.75
8	Accounts Payable Period (Days) (APP)	Mean	31.83	29.82	31.39	31.88	32.89	27.93	28.52	26.05	28.04	29.49
		STD Dev.	14.96	14.40	15.90	15.71	16.07	12.92	13.75	13.38	13.36	14.24
9	Operating Cycle (OC)	Mean	34.42	32.25	33.85	34.34	35.48	33.25	34.09	31.07	33.19	34.91
		STD Dev.	12.25	13.32	14.91	13.03	13.08	12.49	12.99	12.83	12.11	12.47
10	Liquid Ratio (LR)	Mean	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
		STD Dev.	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
11	Gross Profit Ratio (GPR)	Mean	27.40	27.64	27.65	28.33	28.88	28.24	28.07	28.49	28.60	29.78
		STD Dev.	4.60	4.70	5.42	3.76	3.94	4.00	3.83	3.85	4.28	2.88
12	Net Profit Ratio (NPR)	Mean	0.69	0.73	0.76	0.81	0.74	0.75	0.74	0.89	0.83	0.94
		STD Dev.	0.67	0.56	0.79	0.60	0.48	0.65	0.67	0.94	0.76	1.16
13	Cash Ratio (CR)	Mean	0.20	0.20	0.24	0.25	0.25	0.26	0.26	0.26	0.26	0.26
		STD Dev.	0.11	0.10	0.14	0.11	0.12	0.11	0.12	0.12	0.11	0.12
14	Operating Ratio (OR)	Mean	18.90	19.14	19.15	19.83	20.38	19.74	19.57	19.99	20.10	21.28
		STD Dev.	4.60	4.70	5.42	3.76	3.94	4.00	3.83	3.85	4.28	2.88
15	CCC Cash Conversion Cycle	Mean	2.58	2.43	2.46	2.46	2.59	5.33	5.45	5.02	5.16	5.42
		STD Dev.	11.19	10.24	11.25	10.62	11.03	7.66	7.52	7.32	8.03	8.95
16	Return on Total Assests (ROTA) Ratio	Mean	0.0385	0.0402	0.0328	0.0345	0.0363	0.0381	0.0334	0.0350	0.0342	0.0384
		STD Dev.	0.0098	0.0119	0.0076	0.0057	0.0075	0.0094	0.0056	0.0049	0.0059	0.0194

Source: Mean & Standard Deviation of Ratio's Calculated from Secondary –Data Collected from SME's, Chartered Accountants & DIC through Financial Statements/Annual Reports of 100 SME's for the Years 2005-2006 to 2007-08.

ANALYSIS OF DATA BY USING STATISTICAL TOOL: PEARSON CORRELATION COEFFICIENT

Pearson correlation coefficients for the variables used to assess the impact of working capital management on profitability, measured by return on total assets. ROTA is significantly positively correlated with OPM and capital-turnover ratio, but negatively correlated with the measures of WCM, except for the cash conversion cycle. This positive relation for CCC is consistent with the view that resources are blocked at the different stage of the supply chain, thus prolonging the operating cycle. This might increase profits due to increase sales, especially where the costs of tied up capital is lower than the benefits of holding more inventories and granting more trade credit to customers. Also the small manufacturing firms may be able to obtain trade credit from the suppliers and this is supported by the higher proportion of current liabilities to total assets for all the industries except for the paper products.

However, care must be exercised while interpreting the Pearson Correlation coefficients because they cannot provide a reliable indicator of association in a manner which controls for additional explanatory variables. Examining simple bivariate correlation in a conventional matrix does not take account of each variable's correlation with all other explanatory variables. Our main analysis will be derived from appropriate multivariate models, estimated using fixed effects framework and pooled OLS.

DATA ANALYSIS & INTERPRETATION

It is evident that the firms suffer from acute crisis of working capital throughout the period under study. There is negative working capital and short-term liquidity and solvency of the companies are in jeopardy. Current liabilities in totality are more than gross capital and the excess of current liabilities over current assets is negative net working capital.

Debtors & receivables and loans & advances represent 60% or more of gross working capital. Percentage of inventory ranges from 22% to 37% of the gross working capital. From this circumstance, we may infer that the firms are badly constrained to smoothly run the day-to-day commercial operation. It may not be out of place to state that the companies simply cannot afford to hold 20 to 40% of gross working capital as inventory and 60% or more debtors & receivable and loans & advances when it is having negative working capital. Besides, the firm's cash and bank balance comprises 5 to 11 % of gross working capital and this is not at all a standard practice of a manufacturing firm belonging to the category of small manufacturing enterprises. Moreover, the liquidity of loans & advances and other current assets is a very doubtful case, as it remains more or less static in the balance sheet throughout the entire period of study. Under the prevailing situation, the companies should not lock up inventory to the extent of 40% or more of gross working capital and Just-In- Time (JIT). Approach of Inventory Management is the sole answer to appropriate inventory control for the firms under study.

PEARSON CORRELATION COEFFICIENT		ROTA MEAN	CR MEAN	QR MEAN	INVTR MEAN	WCTR MEAN	ARTR MEAN	APP MEAN	OPCY MEAN	LR MEAN	GPR MEAN	NPR MEAN	CSHR MEAN	OPR MEAN	CCC MEAN
		100	100	100	100	100	100	100	100	100	100	100	100	100	100
CR MEAN		.790**	1	.987**	1.000**	.563**	.452**	.156	.141	1.000**	.131	.146	.125	.121	-.048
		.000		.000	.000	.000	.000	.121	.163	.000	.193	.148	.217	.230	.636
		100	100	100	100	100	100	100	100	100	100	100	100	100	100
QR MEAN		.769**	.987**	1	.987**	.527**	.408**	.127	.125	.987**	.119	.128	.107	.103	-.026
		.000	.000		.000	.000	.000	.208	.216	.000	.237	.203	.288	.309	.797
		100	100	100	100	100	100	100	100	100	100	100	100	100	100
INVTRMEAN		.790**	1.000**	.987**	1	.560**	.448**	.155	.140	1.000**	.131	.144	.123	.120	-.047
		.000	.000	.000		.000	.000	.124	.166	.000	.194	.152	.221	.235	.640
		100	100	100	100	100	100	100	100	100	100	100	100	100	100
WCTR MEAN	N	.559**	.563**	.527**	.560**	1	.882**	.188	.228*	.563**	.137	.175	.166	.167	.010
		.000	.000	.000	.000		.000	.062	.023	.000	.175	.081	.099	.098	.923
		100	100	100	100	100	100	100	100	100	100	100	100	100	100
ARTR MEAN	Sig. (2-tailed)	.494**	.452**	.408**	.448**	.882**	1	.190	.229*	.452**	.137	.187	.180	.185	.007
		.000	.000	.000	.000	.000		.058	.022	.000	.175	.063	.072	.065	.943
		100	100	100	100	100	100	100	100	100	100	100	100	100	100
APP MEAN		.070	.156	.127	.155	.188	.190	1	.716**	.156	.685**	.707**	.703**	.699**	-.550**
		.486	.121	.208	.124	.062	.058		.000	.121	.000	.000	.000	.000	.000
		100	100	100	100	100	100	100	100	100	100	100	100	100	100
OPCY MEAN	Pearson Correlation	.128	.141	.125	.140	.228*	.229*	.716**	1	.141	.917**	.954**	.950**	.945**	.190
		.205	.163	.216	.166	.023	.022	.000		.163	.000	.000	.000	.000	.059
		100	100	100	100	100	100	100	100	100	100	100	100	100	100
LR MEAN		.790**	1.000**	.987**	1.000**	.563**	.452**	.156	.141	1	.131	.146	.125	.121	-.048
		.000	.000	.000	.000	.000	.000	.121	.163		.193	.148	.217	.230	.636
		100	100	100	100	100	100	100	100	100	100	100	100	100	100
GPR MEAN		.084	.131	.119	.131	.137	.137	.685**	.917**	.131	1	.973**	.969**	.956**	.133
		.406	.193	.237	.194	.175	.175	.000	.000	.193		.000	.000	.000	.187
		100	100	100	100	100	100	100	100	100	100	100	100	100	100
NPR MEAN		.115	.146	.128	.144	.175	.187	.707**	.954**	.146	.973**	1	1.000**	.997**	.147
		.254	.148	.203	.152	.081	.063	.000	.000	.148	.000		.000	.000	.143
		100	100	100	100	100	100	100	100	100	100	100	100	100	100
CSHR MEAN		.100	.125	.107	.123	.166	.180	.703**	.950**	.125	.969**	1.000**	1	.999**	.148
		.321	.217	.288	.221	.099	.072	.000	.000	.217	.000	.000		.000	.143
		100	100	100	100	100	100	100	100	100	100	100	100	100	100
OPR MEAN		.101	.121	.103	.120	.167	.185	.699**	.945**	.121	.956**	.997**	.999**	1	.147
		.315	.230	.309	.235	.098	.065	.000	.000	.230	.000	.000	.000		.143
		100	100	100	100	100	100	100	100	100	100	100	100	100	100
CCC MEAN		.055	-.048	-.026	-.047	.010	.007	-.550**	.190	-.048	.133	.147	.148	.147	1
		.584	.636	.797	.640	.923	.943	.000	.059	.636	.187	.143	.143	.143	
		100	100	100	100	100	100	100	100	100	100	100	100	100	100

*. Correlation is significant at the 0.05 level (2-tailed).**. Correlation is significant at the 0.01 level (2-tailed).

Major portion of current liabilities includes salaries and wages, sundry creditors for raw materials, expenses & others, statutory liabilities towards retired employees,

short term loan from financial institutions, deposits from contractors, advances on-account -billing against Work in progress and partial delivery of goods, advances against orders etc. It can be observed in the aforementioned table that near about 24% of current liabilities were unrepresented by current assets in almost 20 SME's in the year 2005-2006 and the same is 55%, 60%, 67% and 74% in 2011-2012 to 2007-08 respectively and this was a very critical period for maintaining sustainability of business. However, thereafter it reduces to 39% in 2005-2006 for almost 24 companies and 24% in 2009-2010 for 15 companies but the volume of business has also been drastically reduced during this period.

Working Capital Ratios in order to examine short-term liquidity and solvency of firm is shown in Table No. 6.4. Working Capital Ratios show the financial ability of the firms to meet its current liabilities as well as its efficiency in managing currents assets for generation of sales. It needs no mention that cash/bank balance is converted into raw materials, raw materials is converted into work-in progress, work-in-progress into finished goods, finished goods is converted into debtors and receivables through credit sales and finally debtors to cash/bank and this cash to cash phenomenon is technically known as operating cycle and shorter the operating cycle, greater the degree of efficiency in working capital management.

On the basis of overall analysis, it is therefore pertinent to state that the companies had been suffering from acute crises of working capital. Short-term liquidity and solvency of the firm is in alarming position. Interest and financial security of the short-term creditors is at high risk. Utilization of current assets should have been made in much more effective manner. Under the prevailing circumstances, average inventory and debtors' turnover should have been in between 6 to 9 times if not 12 times. Return on total assets is on average 5.6 % with 20 SMU's having the highest return of 11%. The other 20 SMU's especially Automobile parts manufacturer reported a negative operating profit margin, which could be explained by their high foreign exchange risk exposure and the high labour costs. Typical to the Plastic Products Manufacturing SMU's, the firms have relied mostly on short-term financing, with the pharmaceutical industry being more aggressive, with an average of 82%. On average firms collect their receivables after 65 days while they take on average 116 days to pay suppliers. The average CCC is 105 days, implying that typical to the manufacturing sector firms turnover their stocks on an average of 3.3 times a year. This shows the influence of automobile, pharmaceutical and plastic industries holding inventories for more than 150 days, with a maximum value of 168 days.

Mean sales value for the sample companies is 4 million rupees, with only the paper products industry having a value twice the amount. On average about 22% of all assets are financed with financial debt. It is also noteworthy that the average firm in the sample has a gross working capital turnover ratio of 3.1, thus indicating a lower operational efficiency. The major components of gross working capital include stocks (raw materials, work-in-progress and finished goods), debtors, cash and bank balances.

The composition of working capital depends on a multiple of factors, such as operating level, level of operational efficiency, inventory policies, book debt policies, technology used and nature of the industry. While inter- industry variation is expected to be high, the degree of variation is expected to be low for firms within the industry. Table above gives analysis of each component of working capital and some interesting trends can be deduced.

A comparison of inventory composition of industries over the years shows only slight improvement for the textile and paper products industries. It is interesting to note the consistent improvement in trade debtors share of current assets in all the industries and except for the textile, it represents less that 30% of total current assets. Thus it can be deduced that the companies have monitored the accounts receivable reasonably well and this could be partly due to their need for generating funds from the operating activities instead of relying from outside funds. Except for the paper products, the other type of industries has a greater reliance on short-term funds and this is even more in 2010. The prefabricated automobile product is financing 85% of its assets out of current liabilities and this over-reliance may be a threat to the industry's survival. In terms of liquidity, all the four industries, textile, plastic, automobile and pharmaceutical are having less liquid assets to meet their current obligations and if this becomes permanent, it may affect supplies of materials and thus production. The proportion of liquid assets to total assets is above 70% for the pharmaceutical and automobile industries, indicating a low fixed assets base. This implies that these two industries can operate with a relatively low investment in fixed assets as compared to the other industries like plastic and textile where the production tend to be heavily mechanized. Another plausible reason could be that the Aurangabad District small manufacturing firms have been more concerned about current operations than about longer term issues like capacity and technology.

A well designed and implemented working capital management is expected to contribute positively to the creation of a firm's value The purpose of this chapter is to examine the trends in working capital management and its impact on firms' performance in Aurangabad District. The trend in working capital needs and profitability of firms are examined to identify the causes for any significant differences between the industries. The dependent variable, return on total assets is used as a measure of profitability and the relation between working capital management and corporate profitability is investigated for a sample of 100 small manufacturing firms, using panel data analysis for the period 2005 – 2015. The Pearson Correlation Coefficient results show that high investment in inventories and receivables is associated with lower profitability. The key variables used in the analysis are inventories days, accounts receivables days, accounts payable days and cash conversion cycle. A strong significant relationship between working capital management and profitability has been found in previous empirical work. An analysis of the liquidity, profitability and operational efficiency of the five industries shows significant changes and how best practices in the paper industry have contributed to performance.

The findings also reveal an increasing trend in the short-term component of working capital financing. A firm is required to maintain a balance between liquidity and profitability while conducting its day to day operations. Liquidity is a precondition to ensure that firms are able to meet its short-term obligations and its continued flow can be guaranteed from a profitable venture. The importance of cash as an indicator of continuing financial health should not be surprising in view of its crucial role within the business. This requires that business must be run both efficiently and profitably. In the process, an asset-liability mismatch may occur which may increase firm's profitability in the short run but at a risk of its insolvency. On the other hand, too much focus on liquidity will be at the expense of profitability and it is common to find finance textbooks begin their working capital sections with a discussion of the risk and return tradeoffs inherent in alternative working capital policies. Thus, the manager of a business entity is in a dilemma of achieving desired tradeoff between liquidity and profitability in order to maximize the value of a firm. A conservative financing policy decreases the risk but increases the cost of financing and vice versa, an aggressive policy increases the risk but decreases the cost of financing. In this context, it is hypothesized in the present research work that financial structure and current assets accounting of SMU units in Aurangabad are not very satisfactory, on the basis of the data analysis for the period from 2005-06 to 2014-15.

Current Assets Trend: Trend analysis offers easy to understand changes over a period of time. It is a dynamic method of analysis showing the changes over a period of time. Trend analysis shows the direction in which a company is going on and future movements can be forecast on this basis. In this research work current assets trend of SMU industry in Aurangabad, the data from 2005-06 to 2014-15 have been studied.

TESTING OF HYPOTHESIS BY USING STATISTICAL TOOL: One-way Anova (F-Value Test)

ONEWAY RETURN ON TOTAL ASSETS MEAN(ROTAMEAN) BY CURRENT RATIO MEAN (CRMEAN)

	Sum of Squares	*df*	*Mean Square*	*F*	*Sig.*
Between Groups	.002	35	.000	5.151	.000
Within Groups	.001	64	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Current Ratio Mean (CRMEAN) F-Value is 5.151 greater than the F-Table value which is 3.92. This shows that there is a significant relationship between Return on Total Assets and Current Ratio. The Present study reveals that the Return on Total Assets and Current Ratio has significant relationship. The F-Value calculated shows that F-Value (5.151) is greater than the F-Table Value (3.92). This proves that there is inverse relationship between profitability and degree of Risk.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY QUICK RATIO MEAN(QRMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.002	35	.000	4.722	.000
Within Groups	.001	64	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean(ROTAMEAN) By Quick Ratio Mean (QRMEAN) F-Value is 4.722 greater than the F-Table value which is 3.92. This shows that there is a significant relationship between Return on Total Assets and Quick Ratio.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY INVENTORY TURNOVER RATIO MEAN(INVTRMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.003	83	.000	5.002	.000
Within Groups	.000	16	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean(ROTAMEAN) By Inventory Turnover Ratio Mean (INVTRMEAN) F-Value is 5.002 greater than the F-Table value which is 3.92. This shows that there is a significant relationship between Return on Total Assets and Inventory Turnover Ratio.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY WORKING CAPTIAL TURNOVER RATIO MEAN (WCMTRMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.003	92	.000	2.852	.072
Within Groups	.000	7	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Working Capital Turnover Ratio Mean (WCMTRMEAN) F-Value is 2.852 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Working Capital Turnover Ratio. The present study reveals that the Return on Total Assets and Working Capital Turnover Ratio has No significant relationship. The F-Value calculated shows that F-Value (2.852) is smaller than the F-Table Value (3.92). This means that the sample firms fail to plan adequately its cash, inventory, sundry debtors.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY ACCOUNT RECIEVABLE TURNOVER MEAN (ARTRMEAN)

ARTRMEAN	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.003	98	.000	55.352	.107
Within Groups	.000	1	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean(ROTAMEAN) By Account Receivable Turnover Mean (ARTRMEAN) F-Value is 55.352 greater than the F-Table value which is 3.92. This shows that there is a significant relationship between Return on Total Assets and Account Receivable Turnover.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY ACCOUNT PAYABLE PERIOD MEAN (APPMEAN)

APPMEAN	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.002	70	.000	.569	.971
Within Groups	.001	29	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean(ROTAMEAN) By Account Payable Period Mean (APPMEAN) F-Value is 0.569 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Account Payable Period.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY OPERATING CYCLE MEAN (OPCYMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.001	56	.000	.771	.820
Within Groups	.001	43	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Operating Cycle Mean (OPCYMEAN) F-Value is 0.771 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Operating Cycle.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY LIQUID RATIO MEAN (LRMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.002	35	.000	5.151	.000
Within Groups	.001	64	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Liquid Ratio Mean (LRMEAN) F-Value is 5.151 greater than the F-Table value which is 3.92. This shows that there is significant relationship between Return on Total Assets and Liquid Ratio.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY GROSS PROFIT RATIO MEAN (GPRMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.002	87	.000	.908	.631
Within Groups	.000	12	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Gross Profit Ratio Mean (GPRMEAN) F-Value is 0.908 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Gross Profit. The present study reveals that the Return on Total Assets and Gross Profit Ratio has No significant relationship. The F-Value calculated shows that F-Value (0.908) is smaller than the F-Table Value (3.92). This means that the sample firms had invested more in Assets (Current Assets) which has resulted into the decline of firm's profitability.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY NET PROFIT RATIO MEAN (NPRMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.002	85	.000	1.398	.246
Within Groups	.000	14	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean(ROTAMEAN) By Net Profit Ratio Mean (NPRMEAN) F-Value is 1.398 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Net Profit.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY CASH RATIO MEAN (CSHRMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.002	61	.000	1.491	.095
Within Groups	.001	38	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Quick Ratio Mean (CRMEAN) F-Value is 1.491 smaller than the F-Table value which

is 3.92. This shows that there is No significant relationship between Return on Total Assets and Cash.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY OPERATING PROFIT RATIO MEAN (OPRMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.002	66	.000	1.206	.282
Within Groups	.001	33	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Quick Ratio Mean (CRMEAN) F-Value is 1.206 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Operating Profit.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY CASH CONVERSION CYCLE MEAN (CCCMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.001	58	.000	.714	.883
Within Groups	.001	41	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Cash Conversion Cycle Mean (CCCMEAN) F-Value is 0.714 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Cash Conversion Cycle.

TESTING OF HYPOTHESIS BY USING STATISTICAL TOOL: One-way Anova (F-Value Test)

Hypothesis 1: There is a definite inverse relationship between the degree of risk & profitability.*Hypothesis 4*: Increase in the ratio of current assets to total assets results in decline of the profitability of the firm.

ONEWAY RETURN ON TOTAL ASSETS MEAN(ROTAMEAN) BY CURRENT RATIO MEAN (CRMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.002	35	.000	5.151	.000
Within Groups	.001	64	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Current Ratio Mean (CRMEAN) F-Value is 5.151 greater than the F-Table value

which is 3.92. This shows that there is a significant relationship between Return on Total Assets and Current Ratio.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY QUICK RATIO MEAN(QRMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.002	35	.000	4.722	.000
Within Groups	.001	64	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean(ROTAMEAN) By Quick Ratio Mean (QRMEAN) F-Value is 4.722 greater than the F-Table value which is 3.92. This shows that there is a significant relationship between Return on Total Assets and Quick Ratio.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY GROSS PROFIT RATIO MEAN (GPRMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.002	87	.000	.908	.631
Within Groups	.000	12	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Gross Profit Ratio Mean (GPRMEAN) F-Value is 0.908 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Gross Profit.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY NET PROFIT RATIO MEAN (NPRMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.002	85	.000	1.398	.246
Within Groups	.000	14	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean(ROTAMEAN) By Net Profit Ratio Mean (NPRMEAN) F-Value is 1.398 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Net Profit.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY OPERATING
PROFIT RATIO MEAN (OPRMEAN)

	Sum of Squares	*df*	*Mean Square*	*F*	*Sig.*
Between Groups	.002	66	.000	1.206	.282
Within Groups	.001	33	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN)
By Quick Ratio Mean (CRMEAN) F-Value is 1.206 smaller than the F-Table value which
is 3.92. This shows that there is No significant relationship between Return on Total
Assets and Operating Profit.

Hypothesis 1: There is a definite inverse relationship between the degree of risk &
profitability.

The F-Value calculated for Current Ratio and Quick Ratio shows that F-Value (5.151
& 4.722) is greater than the F-Table Value (3.92). Whereas the F-Value calculated for
Gross Profit/Net Profit and Operating Profit shows that that F-Value (0.908, 0.246 &
0.282) is smaller than the F-Table Value (3.92). This shows that investment in Current
Assets/Working capital of a firm does not always results in increase of profitability.
The present study reveals that almost all the firms had invested sound amount of
money in assets. The profitability of almost all the firms' shows smaller F-Value (0.908,
0.246 & 0.282) than the F-Table Value (3.92). Thus we can say that almost all the firms
are risky in nature i.e. all firms have risk of insolvency/ sickness. If profitability (Gross/
Net/Operating) is more risk is less and vice versa. Hence the study further reveals
that there is inverse relationship between profitability and degree of Risk. Thus the
Hypothesis 1 tested is positive and hence accepted.

Hypothesis 4: Increase in the ratio of current assets to total assets results in decline of
the profitability of the firm.

The F-Value calculated for Current Ratio and Quick Ratio shows that F-Value (5.151
& 4.722) is greater than the F-Table Value (3.92). Whereas the F-Value calculated for
Gross Profit/Net Profit and Operating Profit shows that that F-Value (0.908, 0.246 &
0.282) is smaller than the F-Table Value (3.92). This shows that investment in
Current Assets/Working capital of a firm does not always results in increase of
profitability.

The present study reveals that almost all the firms had invested sound amount of
money in assets. The profitability of almost all the firms' shows smaller F-Value (0.908,
0.246 & 0.282) than the F-Table Value (3.92). Thus we can say that almost all the firms
are risky in nature i.e. all firms have risk of insolvency/ sickness. If profitability (Gross/
Net/Operating) is more risk is less and vice versa. Hence the study reveals that the
sample firms had invested more in Assets (Current Assets) which has resulted into

the decline of firm's profitability. Hence the Hypothesis 4 tested is positive and accepted.

Hypothesis 2: Risk can be minimized by maintaining a higher level of current assets or working capital.

Hypothesis 3: Firms, which adequately plan its cash, inventory, sundry debtors have fewer problems of control than one, which operates without effective policies in these areas.

Hypothesis 5: Decrease in the ratio of current assets to total assets increases the Profitability of the firm because of investment in fixed assets.

Hypothesis 6: Inefficient Management of Working capital leads to sickness

TONEWAY RETURN ON TOTAL ASSETS MEAN(ROTAMEAN) BY CURRENT RATIO MEAN (CRMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.002	35	.000	5.151	.000
Within Groups	.001	64	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Current Ratio Mean (CRMEAN) F-Value is 5.151 greater than the F-Table value which is 3.92. This shows that there is a significant relationship between Return on Total Assets and Current Ratio.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY WORKING CAPTIAL TURNOVER RATIO MEAN (WCMTRMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.003	92	.000	2.852	.072
Within Groups	.000	7	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Working Capital Turnover Ratio Mean (WCMTRMEAN) F-Value is 2.852 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Working Capital Turnover Ratio.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY ACCOUNT RECIEVABLE TURNOVER MEAN (ARTRMEAN)

ARTRMEAN	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.003	98	0	55.352	0.107
Within Groups	0	1	0		
Total	0.003	99			

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Account Receivable Turnover Mean (ARTRMEAN) F-Value is 55.352 greater than the F-Table value which is 3.92. This shows that there is a significant relationship between Return on Total Assets and Account Receivable Turnover.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY INVENTORY TURNOVER RATIO MEAN (INVTRMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.003	83	0	5.002	0
Within Groups	0	16	0		
Total	0.003	99			

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Inventory Turnover Ratio Mean (INVTRMEAN) F-Value is 5.002 greater than the F-Table value which is 3.92. This shows that there is a significant relationship between Return on Total Assets and Inventory Turnover Ratio.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY CASH RATIO MEAN (CSHRMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.002	61	0	1.491	0.095
Within Groups	0.001	38	0		
Total	0.003	99			

The One way Anova F-Value Test Return on Total Assets Mean(ROTAMEAN) By Cash Ratio Mean (CRMEAN) F-Value is 1.491 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Cash.

The present study reveals that the Return on Total Assets and Working Capital Turnover Ratio has No significant relationship. The F-Value calculated shows that F-Value (2.852) is smaller than the F-Table Value (3.92). The study reveals that the sample firms had maintained a higher level of current assets only. The firms failed to maintain its working capital.

The Hypothesis 2 tested is negative and hence rejected.

The F-Value calculated for Working Capital Turnover Ratio, Accounts Receivable Turnover Ratio and Inventory Turnover Ratio shows that F-Value (5.151 & 4.722) is greater than the F-Table Value (3.92).Whereas the F-Value calculated for Gross Profit/Net Profit and Operating Profit shows that that F-Value (0.908, 0.246 & 0.282) is smaller than the F-Table Value (3.92).

This shows that investment in Current Assets/Working capital of a firm does not always results in increase of profitability.

The present study reveals that almost all the firms had invested sound amount of money in assets. The profitability of almost all the firms' shows smaller F-Value (0.908, 0.246 & 0.282) than the F-Table Value (3.92). Thus we can say that almost all the firms are risky in nature i.e. all firms have risk of insolvency/ sickness. If profitability (Gross/Net/Operating) is more risk is less and vice versa.

Hence the study further reveals that there is inverse relationship between profitability and degree of Risk. Thus the Hypothesis 1 tested is positive and hence accepted.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY ACCOUNT PAYABLE PERIOD MEAN (APPMEAN)

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY GROSS PROFIT RATIO MEAN (GPRMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.002	87	0	0.908	0.631
Within Groups	0	12	0		
Total	0.003	99			

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Gross Profit Ratio Mean (GPRMEAN) F-Value is 0.908 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Gross Profit.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY NET PROFIT RATIO MEAN (NPRMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.002	85	0	1.398	0.246
Within Groups	0	14	0		
Total	0.003	99			

The One way Anova F-Value Test Return on Total Assets Mean(ROTAMEAN) By Net Profit Ratio Mean (NPRMEAN) F-Value is 1.398 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Net Profit.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY ACCOUNT RECIEVABLE TURNOVER MEAN (ARTRMEAN)

ARTRMEAN	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.003	98	0	55.352	0.107
Within Groups	0	1	0		
Total	0.003	99			

The One way Anova F-Value Test Return on Total Assets Mean(ROTAMEAN) By Account Receivable Turnover Mean (ARTRMEAN) F-Value is 55.352 greater than the F-Table value which is 3.92. This shows that there is a significant relationship between Return on Total Assets and Account Receivable Turnover.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY ACCOUNT PAYABLE PERIOD MEAN (APPMEAN)

APPMEAN	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.002	70	0	0.569	0.971
Within Groups	0.001	29	0		
Total	0.003	99			

The One way Anova F-Value Test Return on Total Assets Mean(ROTAMEAN) By Operating Cycle Mean (OPCYMEAN) F-Value is 0.771 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Operating Cycle.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY LIQUID RATIO MEAN (LRMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.002	35	0	5.151	0
Within Groups	0.001	64	0		
Total	0.003	99			

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Liquid Ratio Mean (LRMEAN) F-Value is 5.151 greater than the F-Table value which is 3.92. This shows that there is significant relationship between Return on Total Assets and Liquid Ratio.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY OPERATING PROFIT RATIO MEAN (OPRMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.002	66	0	1.206	0.282
Within Groups	0.001	33	0		
Total	0.003	99			

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Quick Ratio Mean (CRMEAN) F-Value is 1.206 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Operating Profit.

ONEWAY RETURN ON TOTAL ASSETS MEAN (ROTAMEAN) BY CASH CONVERSION CYCLE MEAN (CCCMEAN)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.001	58	.000	.714	.883
Within Groups	.001	41	.000		
Total	.003	99			

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Cash Conversion Cycle Mean (CCCMEAN) F-Value is 0.714 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Cash Conversion Cycle.

Hypothesis 2: Risk can be minimized by maintaining a higher level of current assets or working capital.

The F-Value calculated for Working Capital Turnover Ratio and Cash Ratio shows that F-Value (2.852 & 1.491) is smaller than the F-Table Value (3.92). Whereas the F-Value calculated for Current Assets, Accounts Receivable Turnover Ration and Inventory Turnover Ratio F-Value (5.151, 55.352 & 5.002) is greater than the F-Table Value (3.92). This shows that almost all the firms had invested adequately in two or more Current Assets.

The present study reveals that almost all the firms had invested adequately in two or more Current Assets. Thus we can say that almost all the firms who had invested adequately in Current Assets had minimized financial risk/ Risk of Insolvency & Sickness. Hence the study reveals that there is inverse relationship between level of Current Assets and Risk. Thus the Hypothesis 2 tested is positive and hence accepted.

Hypothesis 3: Firms, which adequately plan its cash, inventory, sundry debtors have fewer problems of control than one, which operates without effective policies in these areas.

The F-Value calculated for Working Capital Turnover Ratio and Cash Ratio shows that F-Value (2.852 & 1.491) is smaller than the F-Table Value (3.92). Whereas the F-Value calculated for Current Assets, Accounts Receivable Turnover Ration and Inventory Turnover Ratio F-Value (5.151, 55.352 & 5.002) are greater than the F-Table Value (3.92). The present study reveals that almost all the firms do not adequately plan its cash, inventory and Sundry Debtors/Accounts Receivable and suffer most with the problems of control and operates without effective policies in these areas. Thus the Hypothesis 3 tested is positive and hence accepted.

Hypothesis 5: Decrease in the ratio of current assets to total assets increases the Profitability of the firm because of investment in fixed assets.

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Gross Profit Ratio Mean (GPRMEAN) F-Value is 0.908 smaller than the F-Table

value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Gross Profit. The One way Anova F-Value Test Return on Total Assets Mean(ROTAMEAN) By Net Profit Ratio Mean (NPRMEAN) F-Value is 1.398 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Net Profit. The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Net Profit Ratio Mean (NPRMEAN) F-Value is 1.398 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Net Profit.

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Current Ratio Mean (CRMEAN) F-Value is 5.151 greater than the F-Table value which is 3.92. This shows that there is a significant relationship between Return on Total Assets and Current Ratio.

The present study reveals that the firms who had decrease their Current Assets as compared to Total Assets does not necessarily increase Profitability of the firm because of investment in fixed assets.

Thus the Hypothesis 5 tested is negative and hence rejected.

Hypothesis 6: Inefficient Management of Working capital leads to sickness

The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Working Capital Turnover Ratio Mean (WCMTRMEAN) F-Value is 2.852 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Working Capital Turnover Ratio. The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Cash Ratio Mean (CRMEAN) F-Value is 1.491 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Cash. The One way Anova F-Value Test Return on Total Assets Mean (ROTAMEAN) By Operating Cycle Mean (OPCYMEAN) F-Value is 0.771 smaller than the F-Table value which is 3.92. This shows that there is No significant relationship between Return on Total Assets and Operating Cycle.

The present study reveals that almost all the firms Working Capital Turnover, Cash, Operating Cycle Ratio had smaller F-Value as compared to F-Table value. Further it had been found that more than 50% SMU's during the years of study had managed Working Capital inefficiently. The study reveals that these firms will become sick in a year or two, if the Working Capital is not efficiently managed at least in future. Thus the Hypothesis 6 tested is positive and hence accepted.

CONCLUSION

Difference between actual and trend values of current assets was significant in all small manufacturing companies under study. Difference between actual and trend values of current liabilities was also significant in all small manufacturing companies under study. Current assets turnover ratio tests the efficiency of the utilization of

current assets and helps to assess the degree of efficiency with which short-term funds are used. The current assets turnover ratio has been calculated for evaluation of the over-trading or under-trading of the small manufacturing industry in India under the research period from 2005-06 to 2014-15. The statement showing the average current assets turnover in small manufacturing companies under study is as under-

Number of Companies	*Average of Current Assets Turnover for the Period Covered by Study (in Times)*
36	3.5 to 4.0
24	3.0 to 3.5
18	2.5 to 3.0
14	2.0 to 2.5
06	1.5 to 2.0
02	1.0 to 1.5

Current Assets Turnover Ratio - It is relevant to point out here that current assets turnover ratio reflects the extent to which a small manufacturing company is operating on a small or large amount of current assets in relation to sales. This ratio also shows whether a small manufacturing company is over-trading or under trading. A very high ratio may be the result of over-trading, over trading is indicated by an increase in the amount of sales without a corresponding increase in the amount of current assets. On the other hand, a very low ratio may be the result of under-trading, which means more current assets have been invested in the small manufacturing company than required. The small manufacturing companies which have significant deviations should try to check the increasing trend of current assets. The cash position of current assets should be improved by reducing inventories and efficient collection of debts.

Every small manufacturing company should try to improve the ratio of sales to working capital by increasing sales. Accounting of Cash - Every trading and manufacturing activity begins with cash, operates with cash during its life and finishes leaving cash for its owners. Cash is the most liquid amongst all liquid assets and is of vital importance for daily operations of a small manufacturing company. Cash, like the blood in the human body, gives strength and body to a small manufacturing company. Accounting and control of cash form one of the key components of current assets. The aim of cash accounting and control should be to maintain the adequate cash position to keep the small manufacturing company sufficiently liquid and to use excessive cash in some profitable way.

The cash budget is the most popular technique of determining the level of cash. In the present study, size of cash balance in 40 small manufacturing companies showed a fluctuating trend throughout the period of the study. In ten small manufacturing companies the size of cash marked a decreasing trend throughout the period of the study except in the year 2009. It was found that the size of cash balance in fourteen(14) small manufacturing companies was much higher than other small manufac-

companies during the period of study. As a principle, a small manufacturing company should optimize its cash holdings by keeping a tight control over cash flows. The level of operational adequacy of cash depends on the quantum of output, nature of demand, payment of salaries and wages, availability of credit and fluctuations in the prices of raw materials, stores and spares etc. The turnover of cash and cash in number of days are important to examine the operational adequacy of cash.

There are no standard norms prescribed for the operational adequacy of cash. However, a company should keep its cash and near cash reserves below the requirement of month's normal expenditure. If cash and near cash reserves happen to be above this limit, then it may be concluded that the small manufacturing company is carrying excessive cash. The cash flow statement is an important tool to plan the size of cash in the small manufacturing company. It gives a clear picture of the causes of change in the small manufacturing company's cash position and indicates the financing and investing policies followed by that small manufacturing company.

Cash to Current Assets Ratio - In fifteen small manufacturing companies, the cash to current assets ratio registered a fluctuating trend throughout the study period. It varied from 0.30 percent to 0.60 percent during my research. In case of fourteen small manufacturing companies, it tended to a decreasing trend throughout the period of the study except in the year 2010. In 20 small manufacturing companies, it was very high in the first year of the study. In seven small manufacturing companies, it had registered a fluctuating trend throughout the study period except one year. In remaining eight small manufacturing companies, it had marked a fluctuating trend throughout the study period. There is no standard norm of this ratio. However, roughly in a well-financed small manufacturing company, it should not be less than 5 to 10 percent. The small manufacturing company in my study kept considering this standard a very low amount of cash. A very low proportion of cash to current assets might adversely affect the liquidity position of a small manufacturing company.

Cash to Sales Ratio - The cash to sales ratio is an important tool to control the level of cash in a small manufacturing company. The position of cash to sales ratio varied from one small manufacturing company to another. A fluctuating trend was noticed throughout the study period in small manufacturing companies in my study. The average of this ratio was 1.03 percent in the small manufacturing companies. The increase in turnover is generally associated with large cash balance. Contrary to this, a reverse situation was not noticed in fourteen small manufacturing companies except in a few years. It indicates that proper efforts are not made by these small manufacturing companies to control the cash flows. It is, therefore, recommended that the small manufacturing companies should establish a standard of the cash to sales ratio and should take corrective measures if the performance deviates from the established standards.

Cash to Current Liabilities Ratio - Cash to current liabilities ratio is another way of looking at the efforts of a company to control the cash balances. It analyses the level of

liquid resources. So far as the cash proportion ratio is concerned, the cash position remained decreasing in small manufacturing industry in India throughout the study period except in the year 2010. The cash to current liabilities ratio in sixteen small manufacturing companies registered a fluctuating trend throughout the period of the study while in twenty small manufacturing companies, it registered an upward trend in the first six years and a slight decrease in the last four years of the study. In eighteen small manufacturing companies, it showed a decreasing trend. There was marked a fluctuating trend in sixteen small manufacturing companies, throughout the study period. In twelve small manufacturing companies, it showed decreasing trend in the earlier period of the study and an increasing trend during the later period. In remaining one small manufacturing company this ratio was the highest. An analysis of liquidity of working capital is useful for both the short-term creditors and internal management of a business concern. To the short-term creditors, it indicates the profitability of receiving payment well in time while for internal management it indicates the adequacy or inadequacy of working capital. The liquidity ratios measure the ability of a small manufacturing company to meets its short-term obligations and reflects the short-term financial strength.

There are two important ratios of measuring the liquidity of current assets, current ratio and quick ratio. The current ratio in 44 small manufacturing companies was always higher than the generally accepted norms of 2:1. On the other hand, in twenty eight small manufacturing companies this ratio was always less than the generally accepted norms of 2:1. It is to be noted that a good current ratio works like an umbrella for creditors in rainy days but on the other hand, it may represent underutilization of liquid funds. The current ratio in 36 small manufacturing companies was always higher than that of the average. However, in remaining 64 small manufacturing companies, it is lower than average. To some extent the low ratio indicated inadequacy of current funds, but it may be comparatively better management of current assets. Therefore, it is suggested that these 64 companies should try to improve their liquidity position, because current ratio in these small manufacturing companies always remained less than standard norms. Accounting and Control of Inventory - The study of inventory management is important as it leads to maximization of the owner's wealth. Inventory generally occupies a key position among all the current assets of a manufacturing company. The turnover of working capital is largely governed by the turnover of inventory. It is therefore, essential that an optimum level of inventory is always kept in the business.

Inventory control is a scientific art of determining the optimum level of inventory. The optimum level of inventory should always be kept in the small manufacturing companies. In the sphere of working capital, an efficient and effective management of inventory poses a challenging problem. An efficient control of inventory not only solves the problem of liquidity but also results in a higher profitability and causes substantial reduction in the current assets of a small manufacturing company. Control of inventory is exercised by introducing different measures of inventory control, such as ABC

analysis, fixation of norms for inventory holdings, determining reorder levels and through a close watch on the movements of inventories.

On analyzing the growth rate of inventory during the period of my research, it was found that there was a fluctuating trend in <u>thirty eight</u> small manufacturing companies throughout the study period. The progressive base year percentage growth of total inventory also registered a fluctuating trend in <u>thirty six</u> small manufacturing companies. The growth of inventory in selected small manufacturing companies marked a decreasing trend throughout the study period. The size of inventory should be adequate in relation to its requirement in every small manufacturing company. The adequacy of inventory can be measured through the inventory turnover ratio. Inventory turnover ratio is an indicator of liquidity of inventory also. The turnover of inventory directly affects the profitability of a small manufacturing company.

The higher is the turnover, the larger will be the profits. A low ratio reflects a poor management of inventories. It is possible in a situation of seasonal stocking and over buying. The inventory turnover ratio throughout the period of the study from 2005-06 to 2014-15 was the highest in twenty four small manufacturing companies as compared to the average. The average inventory turnover ratio for the period of the study was 5.2 times during my research.

The growth of small and medium scale industries in the country has been significant in the recent past.

Various backward/remote areas are moving towards industrialization through Small and medium Scale Sector. Industrial promoting agencies have made a mark in the development of state as well as the district industrially. Capital base of small units is very poor and they are facing several financial crisis. Shortage of finance is the main problem responsible for a host of problems. The SMUs are not aware of the credit schemes offered by the commercial banks and nodal agencies. The delays in sanctioning of the loan and the neglecting attitude of the bank officials are the main causes behind the bad perception of SMUs towards the banks. The Central Government should take the initiative in propagating the credit facilities for the SMUs through the channel of NGOs. Financial problems are the root cause for all the problems faced by the SMUs. The State Government should encourage this segment through its Finance Corporation. The entrepreneurs should be motivated to run successfully of their units by taking the advantage of various credit facilities.

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