

WORKING CAPITAL MANAGEMENT OF MAKSON HEALTHCARE PVT LTD: A TRADE -OFF BETWEEN LIQUIDITY AND PROFITABILITY, AN EMPIRICAL STUDY

Ms. Ankita Rajdev,

Assistant Professor,
Faculty of Management, JSSGIW,
Barkatullah University, Bhopal, India

ABSTRACT

This paper makes an attempt to provide an insight into the conceptual side of working capital and to assess the impact of working capital management on liquidity, of Makson. Liquidity management is a prerequisite for the very survival of the concern. The short term creditors of the firm are primarily interested in knowing the firm's ability to meet its current and short term obligations. And so liquidity and profitability trade off have become a crucial issue among any organization. The paper analyses the association between the liquidity management and profitability of Makson Group.

For analyzing the performance of liquidity management, the management accounting technique ratio analysis is used. And statistical techniques like measures of central tendency, measures of dispersion, Pearson correlation, and Spearman's rank correlation have been used. The students't test has been applied to test the significance of rank correlation coefficient.

The findings suggest that the liquidity is managed mostly by owners past experience and data and hence, there is no significant correlation between liquidity and profitability is seen. The originality of the paper is that it conceptualises liquidity management in Makson group as a learning process.

Keywords: Working Capital, Liquidity, Profitability, Trade Off and Makson Healthcare Pvt Ltd.

INTRODUCTION:

Finance required to meet capital expenditure is known as Fixed Capital Finance where as finance required to meet day-to-day or operating business requirements is known as Working Capital Finance. Working Capital Management is a method of deployment of current assets and current liabilities efficiently so as to maximize short-term liquidity. It's a financial metric which represents operating liquidity available to a firm Basically it is the difference between resources of the firm in cash or readily convertible into cash which is known as Current Assets and organizational commitments for which cash will soon be required known as Current Liabilities. The management of working capital involves managing all the current assets and current liability as inventories, accounts receivable and payable, and cash. Working Capital is also known as Revolving or Circulating Capital or Short-Term Capital.

The purpose of working capital management is to manage firm's liquidity so as to maintain efficient profitability. In most of the cases it's been seen that there is always a negative relationship between liquidity and profitability. Therefore, one is complementary to each other. Sound profitability increases the profit of the firm where liquidity helps maintaining the operation of the firm.

There are two concepts of working capital viz. Gross or Quantitative Concept: It means Current Assets. In this the concept is based on optimum investment and financing of current assets. Net or Qualitative Concept: It means difference between Currents Assets & Current Liabilities. In this the concept is based on Liquidity Position of the Firm.

Liquidity management is a prerequisite for the very survival of the concern. The short term creditors of the firm are primarily interested in knowing the firm's ability to meet its current and short term obligations. To eliminate the risk of the inability to meet the short-term obligation or on the other hand to avoid the excessive investment we need to efficiently involve in planning a controlling of current asset and current liabilities which is thus known as liquidity management.

A study of liquidity is of major importance to both the internal and the external analysts because of its close relationship with day-to-day operations of a business (Bhunia, 2010). Dilemma in liquidity management is to achieve desired tradeoff between liquidity and profitability (Raheman et al, 2007).

COMPANY PROFILE: MAKSON HEALTHCARE PRIVATE LIMITED:

In the year 1926 Makson Group started as a small manually operated in-house confectionery products manufacturing unit for local market. Later in the year 1983 Makson expanded as a contract confectionery manufacturer to renowned companies such as Nestle, Cadbury's, Unilever, Hindustan Lever Limited, Ranbaxy, Cipla, Himalaya, Boots Piramal, Knoll Pharma, Coca Cola, Blue Cross Labs, etc. Makson has a dedicated manufacturing facility for P&G, Johnson & Johnson and GlaxoSmithKline. In the year 2004, Makson started manufacturing 100 various types of gumbases, equivalent to International Standards for Chewing and Bubble Gum. Today Makson is the leading Confectionery Machine Manufacturer & also the largest Contract Confectionery Manufacturer in India having its branches at Bhopal & Hyderabad.

REVIEW LITERATURE:

A brief review of the different efforts of research in the field is attempted in the following paragraphs.

3.1(Shin and Soenen, 1998) highlighted that efficient Working Capital Management (WCM) was very important for creating value for the shareholders. The way working capital was managed had a significant impact on both profitability and liquidity. The relationship between the length of Net Trading Cycle, corporate profitability and risk adjusted stock return was examined using correlation and regression analysis, by industry and capital intensity. They found a strong negative relationship between lengths of the firm's net trading Cycle and its profitability. In addition, shorter net trade cycles were associated with higher risk adjusted stock returns.

3.2 A cross - sectional study using a sample of 131 firms listed on the Athens Stock Exchange for the period of 2001–2004 was conducted by Lazaridis and Tryfonidis who explores a statistically significant negative relationship between profitability measured through gross operating profit and independent variables like CCC and financial debt using correlation and regression tests. They suggest that managers can create profits for their companies by correctly handling the CCC and by keeping each component of the conversion cycle at an optimum level.

3.3 Garcia-Teruel and Martinez-Solano (2007) studied the effects of working capital management on the profitability of a sample of small and medium-sized Spanish firms. They found that managers can 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.

3.4 Chakraborty (2008) evaluated the relationship between working capital and profitability of Indian pharmaceutical companies. He pointed out that there were two distinct schools of thought on this issue: according to one school of thought, working capital is not a factor of improving profitability and there may be a negative relationship between them, while according to the other school of thought, investment in working capital plays a vital role to improve corporate profitability, and unless there is a minimum level of investment of working capital, output and sales cannot be maintained - in fact, the inadequacy of working capital would keep fixed asset inoperative.

3.5 Singh and Pandey (2008) suggested that, for the successful working of any business organization, fixed and current assets play a vital role, and that the management of working capital is essential as it has a direct impact on profitability and liquidity. They studied the working capital components and found a significant impact of working capital management on profitability for Hindalco Industries Limited. The conclusive sum of this retrospective review of relevant literature produced till date on the offered subject reveals wide room for the validity and originates of this work and reflects some decisive evidences that affirm its viability, as may be marked here it. Nor has any previous research examined the liquidity position and the existence of liquidity and profitability relationship of private sector steel companies in India.

3.6 Joshi and Ghost (2012) examine the working capital performance of Cipla Ltd. during the period 2004-05 to 2008-09. The findings of the study show that there is a significant positive trend growth in most of the selected performance indicators. Further, the selected ratios show satisfactory performances during the study period. The researcher have used Motaals test to indicate significant improvement in liquidity performance during the period. The conclusion of the study is that there exists significant negative relationship between liquidity and profitability, which indicates that Cipla Ltd. has maintained post optimal level of liquidity during the period under study.

MATERIALS AND METHOD:

RESEARCH QUESTIONS:

1. To know the working capital management of Makson
2. How much is the fluctuation in the working capital of Makson in four years
3. To know the relation between liquidity and profitability.

SCOPE OF THE STUDY :

The scope of the study was limited to see the impact of working capital on the liquidity of Makson Healthcare Pvt Ltd, and for four year and to study the relation between the liquidity and profitability .The study was also made to see the impact of operating cycle on liquidity .

SIGNIFICANCE OF THE STUDY :

The study has a contribution to the existing knowledge in the area of working capital management and liquidity management. The study is a contribute to the financial sector of the health care sector and economy as a whole. Therefore, the major benefit from this study is too health care sector , regulatory bodies, the academic staff.

OBJECTIVE OF THE STUDY:

1. To study the Working Capital management of Makson Healthcare Pvt. Ltd.
2. To find the change in working capital for 4 years.
3. To calculate the operating cycle of Makson Healthcare Pvt. Ltd.
4. To find the significant correlation between liquidity and profitability.

HYPOTHESIS OF THE STUDY:

For the purpose of our study we have taken the last four year data of Makson ltd .With the help of the data; we will try to evaluate the relationship between profitability and liquidity. Since the purpose of our study is to find the relation between liquidity and profitability, the study makes a set of testable hypothesis.

H₀ : There is no significant correlation between liquidity and profitability.

H₁ : There is a significant correlation between liquidity and profitability.

METHODOLOGY OF THE STUDY:

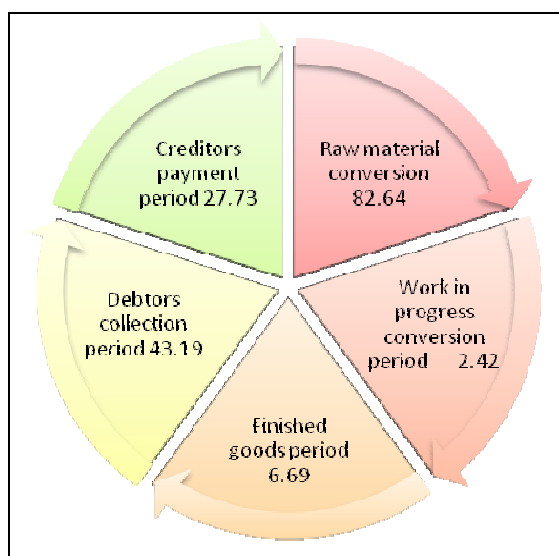
The data have been suitably rearranged, classified and tabulated according to the requirements of the study.

- Nature of study: Case Study
- Sample Design: Judgmental
- Data Source: Annual report of the company
- Type of Data: Secondary Data
- Period of Data: 2008-09 to 2011-12
- Statistical Tools: For analyzing the performance of liquidity management, the management accounting technique ratio analysis is used. And statistical techniques like measures of central tendency, measures of dispersion, Pearson correlation, and Spearman's rank correlation have been used.

Efficacy of the Liquidity Management: To assess the qualitative efficacy of the liquidity management of Makson Healthcare Pvt. Ltd., comparisons of size of working capital and important liquidity ratios of the company have been analyzed.

RESULT AND DISCUSSION:

Figure 5.1: Shows the Operating Cycle of Makson .



The duration of time required to complete the following sequence of events, in case of manufacturing firm, is called the operating cycle:

- Conversion of cash into raw materials.
- Conversion of raw materials into work-in-progress
- Conversion of work in process into finished goods.
- Conversion of finished goods into debtors and bills receivables through sales.
- Conversion of debtors and bills receivables into cash.

Total operating cycle = Average Raw material consumption period + Work in progress + Finished goods period + Debtor collection period – Creditor payment period

$$= 82.64 + 2.42 + 6.69 + 43.19 - 27.73$$

$$= 107.218 \text{ Days}$$

Hence the total days to convert the raw material and sell and recover the money in the market are 107 days, according to other health care industry the days are fine still the scope of improvement is there. The cycle also shows that the money invested on first day will get on 107th day, it means the money will be block in working capital for almost 3 and half months.

Table 1: It shows the Size of Working Capital and Ratio relating to Liquidity Management.
The interpretations of the table are

Year	WC	CR	LR	CATTAR	CATR	WCTR	WCSR	DTR	ACP (days)
2009	36762419	1.81	1.3	0.46	1.66	3.71	0.27	10.56	33.62
2010	54197803	2.32	1.68	0.49	1.24	2.17	0.46	5.82	61.00
2011	71635893	2.84	2	0.45	1.61	2.49	0.40	7.16	49.58
2012	61788500	2.31	2.06	0.45	1.80	3.18	0.31	8.56	41.47
Avg	56096153.75	2.32	1.76	0.46	1.58	2.89	0.36	8.02	46.42
SD	14734125.21	0.42	0.35	0.02	0.24	0.69	0.09	2.03	11.70
CV%		18.13	19.83	4.22	15.30	23.95	23.77	25.28	25.21
Median	57993151.5	2.315	1.84	0.45	1.63	2.84	0.36	7.86	45.53

- Current ratio (CR) indicates extent of soundness of the current financial position of a company, and the degree of safe and security provided for the creditors. Ideal current ratio is 2:1 is considered to be satisfactory. The average current ratio was 2.32 which showed a good liquidity position of company. The standard deviation was 0.42 and CV% was 18.13.
- Liquid or quick ratio(LR) fluctuated from 1.3 to 1.68 between the periods of 4 years. The accepted norm is 1:1. The average of 1.64 indicates a good position from creditor's point of view. However, from management point of view, it indicates poor investment policy because excessive liquidity may lead to lower profitability. The S.D is 0.29 and CV% is 17.55%.
- Current Assets to total assets ratio (CATTAR)to it is inferred that 46% of the total investment of the company is made for working capital purpose. Higher investment in current assets will increase liquidity but it will decrease profitability. . The S.D is 0.2and CV% is 4.2%.
- Current assets turnover ratio (CATR) is applied to measure the turnover and profitability of the total current assets employed to conduct the operation of a firm. The overall average is 1.58 times which indicates unfavorable performance. The S.D. is 0.24 and CV% is 15.3%.
- Working capital turnover ratio (WCTR) helps to measure the efficiency of the utilization of working capital. The ratio has been increasing in the period of 4 years which shows that it is supporting, comparatively, higher level of production and sales; it is being used more intensively.
- Working capital to sales ratio (WCSR): A high ratio is a sign of possible inefficiency in the use of short term financial resources by the company. A lower ratio implied, by and large, a more efficient use of funds. The overall average is 0.36 which indicates efficient use of short term financial resources of the company. The S.D IS 0.09 and CV% is 23.77%.
- Debtors' turnover ratio indicates the velocity of debt collection of firm. This ratio has shown an increasing trend over the period with an average of 8.02 which indicates good management of debtors or we can say debtors are more liquid. The S.D. is 2.03 and CV% is 25.28%.
- Average collection period shows the number of days that elapse between the date of actual credit sales to the debtors and the date of actual payment made by the debtors for the same. The company has shorter collection period which means payment by debtors are not delayed or we can say better is the liquidity of debtors in the period of 4 years as average collection period is 46.42. The S.D. is 11.7 and CV% is 25.21%.

Table 2: Shows the Statement of Liquidity in order of Ranking

Year	As% to total current assets			Liquidity rank				
	Debtors	Cash	Loan& advances	Debtors	Cash	Loan& advances	Total rank	Ultimate rank
2008-2009	15.70	0.03	55.26	4	4	1	9	4
2009-2010	21.27	0.05	50.85	2	3	2	7	1
2010-2011	22.45	0.29	47.64	1	2	4	7	1
2011-2012	21.07	1.10	48.52	3	1	3	7	1

Motaal's comprehensive test is been used in order to evaluate the liquidity position of the selected companies has been used. To find out the more comprehensive assessment of liquidity a method of ranking has been applied to. In this method, three different factors such as cash & bank to current assets ratio, debtors to current assets ratio and loan & advances to current assets ratio have been calculated. The higher the value of both working capitals to current asset ratio and liquid resources to current asset ratio, relatively the more favorable

will be the liquidity position of a firm and vice-versa. On the other hand, lower the value of stock to current assets ratio, relatively the more favorable will be the liquidity position of the firm. The ranking of the above three ratios of a firm over a period of time is done in their order of preferences. In other words, lower the value of this ratio higher the rank and vice versa. On the other hand, a high value of debtors to current assets ratio, cash & bank balances to current assets ratio and loans & advances to current assets ratio show a relatively favorable liquidity position and ranking has been made in that order (Higher the values of these ratios, higher the rank and vice versa). At last, ultimate ranking has been made on the principle that the lower the total of the individual ranks, the more favorable is the liquidity position of the company and vice versa (Lower the value of the individual ranks, higher the rank has been given and vice versa).

Table exhibits the liquidity position and its ranks of the Makson Group. The company registered the most sound liquidity position in the years 2009-2010, 2010-2011 and 2011-2012 in the order of ranking. Thus, it indicates that liquidity position of the enterprise is more or less constant over the period under study. It shows the fluctuation in the liquidity position over the different years of the study period. The study also shows that in the last three years the company has the more sound and stability in the liquidity position compared to the other years of the study period.

Table3: Relationship between liquidity and profitability (Spearman's Rank Difference method used)

Year	Current assets to total assets%	Liquidity rank	Return on avg. capital employed%	Profitability rank	Rank difference(d)	D ²
2009	46.02	2	15.93	1	1	1
2010	48.95	1	6.74	3	-2	4
2011	44.71	4	6.41	4	0	0
2012	44.95	3	9.46	2	1	1

t-TEST for Significant of An Observed Sample Correlation between Liquidity and Profitability-

	Liquidity	Profitability
Mean	2.5	2.5
Variance	1.6666667	1.6666667
Observations	4	4
Pearson Correlation	0.4	
Hypothesized Mean Difference		
Df	2	
t critical two-tail	3.182	

Formula for t-Test:

$$= \frac{R * \sqrt{n-2}}{\sqrt{1-r^2}}$$

$$= \frac{0.4 * \sqrt{4-2}}{\sqrt{1-0.42}}$$

$$= 0.61$$

Value of t at 5% level of significance is 3.182. Our computed value is less than table value which means null hypothesis is accepted. That means there is no significant relationship between profitability and liquidity.

FINDINGS AND CONCLUSION:

FINDING:

1. The average size of working capital was Rs. 56096153 which showed a good liquidity position of company.
2. The 4 years average current ratio (2.34) shows that liquidity position of company was very good from creditor's point of view. But from management point of view, it reflects financial planning and inefficient tie up of funds.
3. The 4 years average liquid ratio (1.76) indicates the inefficiency management of liquid funds.

4. The 4 years average Current assets to total assets ratio (0.46 times/ 46%) expresses the balance between liquidity and profitability.
5. The overall average current assets turnover ratio was 1.58, indicating worse utilization of current assets.
6. Average Debtors turnover ratio (8.02 times) implies that payments by debtors are not delayed and there is good liquidity.
7. Average collection period indicates the good credit policy adopted by company and shows that company makes payments on time.
8. Operating cycle of Makson Healthcare Pvt. Ltd is 107 days. Number of working days being 355 days.
9. Average Working capital to sales ratio (WCSR: 0.36 times) indicates efficient utilization of short term funds.
10. Working capital turnover ratio has been increasing in the period of 4 years which shows that it is supporting, comparatively, higher level of production and sales; it is being used more intensively.
11. The rank correlation, Pearson,s correlation, T test shows that liquidity and profitability were less correlated to each other.

CONCLUSION:

Working Capital is the lifeline of every industry, irrespective of whether it's a manufacturing industry, services industry. Working capital management is important aspect of financial management. The study of working capital management of Makson Healthcare Pvt. Ltd. has been done on the basis of ratio analysis, measures of central tendency and dispersion, Pearson correlation, working capital components which helped the company to manage its working capital efficiently and effectively. The company has a good liquidity position and does not delay its commitment in case of both its creditors and debtors. The background of company is very strong enough to resist the imbalances of markets as well as economy. They have been able to manage working capital components efficiently. During the current year sales reached the new milestone .Even in some of quantitative measures like better sourcing of raw material, productivity or cost of financing, Makson created new landmarks and list is growing further.

Management of liquidity and profitability has become a crucial issue in today's cut throat competition. The findings suggest that the liquidity is managed mostly by owners past experience and data and hence, there is no significant correlation between liquidity and profitability is seen.

LIMITATIONS OF THE STUDY:

The study suffers from certain limitations which are stated as follows:

- i. The study has been conducted over a very limited period of four years only.
- ii. The study is based on secondary data.
- iii. The study is limited to a single company. Hence, it will reflect only a partial view of the overall working capital management in the Indian healthcare industry.
- iv. The study is based on consolidated financial statements of the selected company, which may leave some grounds of error.

DIRECTION FOR FUTURE RESEARCH:

The present study is limited to the extent of a single company. Hence, further research may be conducted to reflect the overall view of working capital management in the Indian healthcare industry.

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