Working Capital Management in Indian Paper Industry – A Study Sirpur Paper Mills Limited – Kaghaznagar, Andhra Pradesh.

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INTRODUCTION

The importance of working capital in an industry cannot be overstressed, as it is one of the important causes of success or failure of an industry. Whatever be the size of a business, working capital is its lifeblood. For running a business successfully, an adequate amount of working capital is essential. A firm with shortage of working capital will be technically insolvent. In India, paucity of working capital has become a chronic disease in the industrial sector. According to Gitman, the goal of working capital management is to manage each of the firm's current assets and current liabilities in such that an acceptable level of net working capital is maintained. The firm has to invest enough funds in current assets for generating sales, where the companies need good management practices over the working capital to ensure the same. However this call for a systematic and integrated approach towards the utilizition of companies' assets with maximum efficiency enables efficient management of current assets and provides analytical insights into its impact on profitability. In this research paper an attempt has been made to analyze the working capital levels and their composition, turnover and the liquidity position of Sirpur Paper Mills Limited to bring out its usefulness for effective liquidity management. This paper also analyse the impact of working capital on profitability of the company.

Working capital can be regarded as circulated system of any business. It is firm's total investment in current assets. Current assets are those assets which are likely to be converted into cash, sold/exchanged or expensed in the normal course of business, usually within one year. Working capital constitutes funds needed to carry out the day-to day operations of a business such as purchase of raw materials, payment of wages and other expenses. Net working capital is the difference between the firm's current assets and current liabilities. Current liabilities are debts and other obligations that fall due within one year. In other words, net working capital is the portion of current assets, which must be financed with long-term debt and equity.

If the firm does not invest sufficient funds in current assets, it may become illiquid and it would lose profitability, as idle fixed assets would not earn anything. Thus, a proper trade-off must be achieved between profitability and liquidity. In order to ensure that neither insufficient nor unnecessary funds invested in current assets, the financial manager should estimate firms needs for current assets and make sure that funds would be made available when needed. Working capital decisions are required to plan and control the flow of dollars among various working capital accounts and other balance sheet accounts to ensure adequate liquidity for the firm. Therefore, the financial manger must determine the optimum level of current assets in order to manage the working capital of a firm.

NEED FOR THE STUDY

The basic objective of financial management is to maximize the shareholders wealth, which is possible only when company can earn sufficient profits. The amount of such profit largely depends upon the magnitude of sales. The firm has to invest enough funds in current assets which cannot be converted in to cash instantaneously, as there is always a time gap between the sale of goods and receipt of cash. The significance of working capital is felt for this period in order to sustain the sales activity. However, working capital is required because of the time gap involve between various phases of "operating cycle". Hence, it is felt that there is a need to study the working capital management in Sirpur Paper Mills Limited.

OBJECTIVES OF THE STUDY

The main objective of the study is to identify the working capital management in Sirpur Paper Mills Limited. It includes

1. To know the liquidity position of Sirpur Paper Mills Limited in order to examine its ability to meeting current obligations.
2. To understand the impact of the working capital on profitability of Sirpur Paper Mills Limited.
3. To present summary of the study and offer suitable suggestions if necessary.

SOURCES OF DATA AND METHODOLOGY

The study is based on the data collected from secondary source which is gathered from the Annual Reports of Sirpur Paper Mills Limited, published materials in the form of books, articles from journals, websites and reports relevant to the study. The study of working capital management covers a period of 5-years, commencing from 2007-2008 to 2011-2012. The statistical techniques used for the analysis of data are percentages, averages, trends and coefficient of correlation to identify the working capital impact on profitability of the company. In addition to that various ratios pertaining to working capital management are also applied for analyzing the data with a view to draw useful inferences.

STRUCTURE OF CURRENT ASSETS

The current assets include inventory, sundry debtors, cash and bank balances loans and advances and other current assets. The data pertaining to the structure of current assets both the absolute amounts and percent to total of Sirpur Paper Mills Limited are presented in Table-01 with a view of examine the major components of current assets.

Table – 01: Structure of Current Assets

Financial Years	Inventories	Sundry Debtors	Cash & Bank Balances	Loans & Advances	Other Current Assets	Gross Working Capital
2007-08	2,327.13 (26.25%)	2,341.52 (26.41%)	651.11 (7.35%)	3,545.19 (39.99%)	-	**8,864.95 (100%)**
2008-09	3,064.53 (22.30%)	6,109.49 (44.46%)	1,149.86 (8.37%)	3,416.37 (24.87%)	-	**13,740.25 (100%)**
2009-10	3,521.30 (27.04%)	4,887.98 (37.50%)	468.27 (3.60%)	4,152.66 (31.86%)	-	**13,030.21 (100%)**
2010-11	3,029.76 (22.72%)	5,392.73 (40.45%)	827.30 (6.20%)	4,084.15 (30.63%)	-	**13,333.94 (100%)**
2011-12	4,620.95 (28.53%)	6,248.47 (38.58%)	1,392.87 (8.4%)	3,039.10 (18.76%)	894.73 (5.1%)	**16,196.12 (100%)**
Average	**16,563.67 (25.42%)**	**24,980.19 (38.34)**	**4,489.41 (6.89%)**	**18,237.47 (27.98%)**	**894.73 (1.37%)**	**65,165.47 (100%)**

Source: *Annual Reports of Sirpur Paper Mills Limited – 2007-2012.*

Above data reveals that the on an average inventory formed 25.42 percent, sundry debtors accounts 38.34 percent, cash and bank balances formed 6.89 percent, loans & advances formed 27.98 percent where as other current assets formed only 1.37 percent of total current assets of the company during the study period. Hence, it can be said that sundry debtors is the major component of current assets, fluctuated between the lowest of 26.41 percent (2007-08) and the highest of 38.34 percent (2011-12) during the study period. The next major component is loans & advances fluctuated between the lowest rate of 18.76 percent (2011-12) and the highest rate of 39.99 percent (2007-08). Inventories moved between 22.30 percent (2008--09) and 28.53 percent (2011-12). Cash and bank balances claming a lowest of 3.60 percent (2009-10) and the highest of 8.37 percent (2008-09). Other current assets registered only 5.1percent in the year 2011- 12.

It is clearly evident from the above analysis that the sundry debtors play a major role in current assets causing a concern of low liquidity. Therefore, proper measures are required to improve the liquidity position by restructuring the credit sales to a marked extent.

STRUCTURE OF CURRENT LIABILITIES

Now, it is proposed to present structure of current liabilities of Sirpur Paper Mills Limited in Table –2 with a view to identify the major sources of liabilities reflecting the financing policy of the company. An analysis of the table discloses the facts that the current liabilities of the company include creditors and other provisions.

Table – 02: Structure of Current Liabilities

Financial Years	Creditors	Provisions	Total Current Liabilities
2007-08	8,349.95 (87.50%)	1.192.08 (12.50%)	**9,542.03 (100%)**
2008-09	10,262.03 (90.06%)	1,132.53 (9.94)	**11,394.56 (100%)**
2009-10	9,012.30 (90.07%)	992.86 (9.93%)	**10,005.16 (100%)**
2010-11	9,676.30 (71.64%)	1,126.16 (28.35%)	**13,505.82 (100%)**
2011-12	10311.19 (57.28%)	7689.33 (42.72%)	**18,000.52 (100%)**
Average	**47,611.77 (76.24%)**	**10,940.88 23.76%**	**62,448.09 100%**

Source: *Annual Reports of Sirpur Paper Mills Limited – 2007-2012.*

Above data indicates that the total current liabilities of the company was observed at Rs. 9,542.03 lakhs in the year 2007-08 and it increased to Rs. 18,000.52 lakhs in the year 2011- 12.This indicates an increase of almost two-times in current liabilities over a period of five-years. This reflects that the factory has been depending heavily upon current liabilities to finance its current assets requirement. The policy is called an aggressive working capital financing policy. However, it affects the liquidity position of the company.

TRENDS IN WORKING CAPITAL

To analyze the trends in working capital – both gross and net, the data pertaining to current assets, current liabilities and net working capital, are presented in table - 03.

Table 3: Trends in Working Capital

Years	Current Assets	Current Liabilities	Net Working Capital
2007-08	8,864.95	9,542.03	**-677.08**
2008-09	13,740.25(54.99)	11,394.56 (19.41)	**2,345.69**
2009-10	13,030.21(-5.17)	10,005.16(-12.19)	**3,025.05**
2010-11	13,333.94(2.33)	13505.82(34.99)	**-171.88**
2011- 12	16,196.12(21.46)	18000.52(33.28)	**-1,804.40**
Average	**18.40**	**18.87**	

Source: *Annual Reports of Sirpur Paper Mills Limited – 2007-2012.*

An examination of the above data reveals that the total current assets of Sirpur Paper Mills Limited were at Rs. 16,196.12 lakhs (2006-07) against Rs. 8,864.95 lakhs (2007-08). This shows the two times increase over period under review. The analysis of the annual rate of growth shows that a very wide fluctuation from year to year in the total investment of current assets. The growth rate in current liabilities showed that the highest rate at 34.99 percent in 2010-12, followed by decline at 33.28 percent in 2011-12. Net Working Capital of the company was moved between Rs. - 677.08 lakhs (2007-08) and 3,025.05 lakhs (2009-10), during the study period. Hence, it can be concluded that the net working of the company presented wide variations and in the last two years the negative working capital indicates the use of short-term funds for long-term purposes.

IMPACT OF WORKING CAPITAL ON PROFITABILITY

Impact of working capital on profitability is examined in order to know the liquidity position of the company by using the liquidity ratios. The data determining to the liquidity pattern of the company is presented in Table – 04. An examination of the table reveals the following facts.

Table – 04: Liquidity Pattern of the Company

Years	CR	QR	WCTAR	WCTR	DTR	CTR	ITR	PBT
2007-08	0.93	0.68	-0.01	-41.35	11.99	43.00	12.03	1679
2008-09	1.21	0.94	0.04	15.71	6.03	32.05	12.02	-132
2009-10	1.30	0.95	0.05	11.55	7.15	74.60	9.92	-1045
2010-11	0.99	0.76	-0.003	-220.69	7.03	45.85	12.55	-1819
2011-12	0.90	0.64	-0.03	-22.76	6.57	29.48	8.89	-2207
Average	**1.07**	**0.79**	**0.009**	**-51.51**	**7.75**	**45**	**11.08**	**-3524**
Coefficient of Correlation	**0.011**	**0.031**	**0.14**	**0.31**	**0.79**	**0.001**	**0.49**	

Source: *Annual Reports of Sirpur Paper Mills Limited – 2007-2012.*

Above table reveals that the various ratios;

- **Current Ratio:** It is observed from the table, that the current ratio was highest at 1.30 and the lowest at 0.90 and its average was at 1.07 times during the period under review. Current Ratio of the company is no way comparable with a general standard of 2:1. This is on account of the fact that the company has made use of excessive short-term liabilities for financing fixed assets. Therefore, it highlights that the liquidity position of the firm as revealed by current ratio is not favorable.

  The co-efficient of correlation between the profitability and current ratio of the company was registered at 0.011. This indicates that there is a low degree of positive correlation between the two variables.

- **Quick Ratio:** The quick ratio was highest at 0.95 times in 2009-10, lowest at 0.64 times in 2011-12, and its average was at 0.72 times. This ratio was lower than 1:1 standard quick ratio in 5 years of the study period. It can be concluded that the liquidity position of the organisation is not satisfactory. However, if look into year wise data, it reveals that the company is not having favorable liquidity position. The basic reason for such pattern is due to excessive debtors balances, which stood at 38.34 percent of total current assets. Therefore, to improve the liquidity pattern of the firm it is necessary to tighten the credit policy to minimize investment in debtors and maximize cash collections.

  The coefficient of correlation between the profitability ratio and quick ratio stands at 0.031. This indicates that there is a low degree of positive correlation between the two variables.

- **Net Working Capital to Total Net Assets:** The Net working capital to total net assets ratio is another measures of liquidity, and explains the quality of working capital that is being financed with the help of long-term sources. In many years of the study, there was negative working capital signaling that the company has used excessive current liabilities. This is a tendency of aggressive working capital financing and also shows greater negative impact on liquidity pattern of the company. The ratio was negative in 3 out of 5 years of the study, where as it was strikingly low and moved between –0.003 to 0.05 with an average of 0.009 times during the period under review. This went to support our conclusion of unfavorable liquidity pattern of the company during the period under review.

The coefficient of correlation between the profitability ratio and net working capital to the assets stands at 0.14. This indicates that there is a low degree of positive correlation between the two variables.

- **Working Capital Turnover Ratio:** The net working capital turnover ratio is negative in 3 out of 5 years of the study in view of excessive usage of short-term sources. In the remaining periods of the study it was as high as at 15.71 times in 2008-09 and low at – 22.76 times in 2011-12. The average of net working capital was -51.51 times. Therefore, it can be concluded that the liquidity position is not improved and the business has suffered from unfavorable liquidity pattern.

The coefficient of correlation between the profitability ratio and working capital turnover ratio stands at 0.31. This indicates that there is a positive correlation.

- **Debtors Turnover Ratio:** This ratio shows the efficiency of the organisation in debtors use. The structure of current assets revealed that debtors represent major component and on an average it accounted for 38.24 percent of total current assets. Such heavy investment in debtors if managed effectively to generate the sales will not only improve the profitability of the organisation, but also the liquidity. However, this ratio shows that the highest at 11.99 times in 2007-08 with the lowest being 6.57 times in 2011-12, with an average of 7.75 times. This points out that, the organisation has generated the lowest sales.

The coefficient of correlation between profitability and debtors' turnover ratio stood at 0.79 times during the study period. This indicates that there is a high degree of positive correlation between the two variables.

- **Cash turnover Ratio:** The Cash Turnover Ratio (CTR) of the company has moved between 29.48 and 74.60 during the entire studies period, which moderately well as compared to the standard norm of 0.5:1.

The coefficient of correlation between profitability ratio and cash ratio stand at 0.001. This indicates that there is very low level of positive correlation between two variables.

- **Inventory Turnover Ratio:** The turnover of inventory explains the speed at which the inventory and its components converted into sales. Inventory turnover ratio was the highest at 12.55 times during the year 2010-11 and declined to 8.89 times in the year 2011-12. On an average the inventory turnover ratio was at 11.08 times which indicates the efficient management of inventory by the company.

The coefficient of correlation between the profitability ratio and inventory turnover ratio stands at 0.49. This indicates that there is a positive correlation between the two variables.

Conclusions: The following are the conclusions drawn from the study.

- The sundry debtors are the major component of current assets fluctuated between the lowest of 26.41 percent (2007-08) and the highest of 38.34 percent (2011-12) during the study period.
- The factory has been depending upon heavily on current liabilities to finance its current assets requirement. The policy is called an aggressive working capital financing policy. However, it affects the liquidity position of the company.
- Net Working Capital of the company was moved between Rs. - 677.08 lakhs (2007-08) and 3,025.05 lakhs (2009-10), during the study period. Presenting wide fluctuations.
- The current ratio was highest at 1.30 and the lowest at 0.90 and its average was at 1.07 times during the period under review highlighting that the liquidity position of the firm is not favorable.
- The quick ratio was the highest at 0.95 times in 2009-10, the lowest at 0.64 times in 2011-12, and its average was at 0.72 times. This ratio was lower than that of 1:1 standard quick ratio 5 years of the study representing unsatisfactory liquidity position.
- There is a tendency of aggressive working capital financing and also shows greater negative impact on liquidity pattern of the company. The ratio was negative in 3 out of 5 years of the study, where as it was strikingly low and moved between –0.003 to 0.05 with an average of 0.009 times during the period under review. This also will support our argument of unfavorable liquidity position of the company during the period under review.
- The net working capital turnover ratio is negative in 3 out of 5 years of the study period depicting excessive usage of short-term sources. In the remaining periods of the study it was as high as at 15.71 times in 2008-09 and lowest at – 22.76 times in 2011-12. The average of net working capital was -51.51 times.
- The debtor turnover ratio shows the efficiency of the organisation in debtors use. This ratio shows that the highest at 11.99 times in 2007-08 with the lowest being 6.57 times in 2011-12, with an average of 7.75 times. This points out that, the organisation has generated the lowest sales though the company was liberal in its credit policy.
- The Cash Turnover Ratio (CTR) of the company has moved between 29.48 and 74.60 during the entire study period, which moderately well as compared to the standard norm of 0.5:1.

- The turnover of inventory explains the speed at which the inventory and its components converted into sales. Inventory turnover ratio was the highest at 12.55 times during the year 2010-11 and declined to 8.89 times in the year 2011-12. On an average the inventory turnover ratio was at 11.08 times which indicates the efficient management of inventory by the company.

Suggestions:

The following suggestions are offered to make the working capital management system of the company more effective for its successful survival in the competitive business world.

1. The company must adopt and use varies scientific methods of working capital management so that the current assets are to be maintained at optimum level.
2. The debtor's balances are to be reduced to the extent possible by framing credit policy based on a credit standard, credit terms and credit rating customers.
3. The aggressive financing policy adapted by the company is to be reviewed so that the permanent working capital and the total fixed assets are to be framed with long –term sources consisting of debt and equity, rather than using short term sources only.
4. The idle cash balance of the company is to be effectively used in profitable investment opportunities by systematically planning cash flows and identifying the cash surpluses.
5. Correct estimation of working capital should be made and heavy fluctuations in quantum of working capital as a relation to sales should be avoided.

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