

## Capital Management of Paper Mill in Pune City - Empirical Analysis

Yashodhan P.Mahajan

Head - Department of Accountancy

Brihan Maharashtra College of Commerce, Pune, Maharashtra.

### ABSTRACT

The well-organized administration of working capital is very essential for an establishment. This is observed on the truth, having excessive working capital signify inefficiency, whereas too small cash at hand signify that the continued existence of business is insecure.

The thought of working capital management is all about the economic and monetary parts of credit, stock, selling, purchasing, saving and investment policy. The larger the profit markup, the smaller will be the possible level of working capital attached in creating and selling commodities. In accounting language, the difference between current assets and current liabilities is known as working capital. The important concern in the word "Current" is that it is probable be converted into cash, or possibly be paid from cash, within the stage of twelve calendar months. As a rule of thumb, an establishment desires to tie up small amount of money as much as feasible in working capital. Nevertheless, there are always trade-offs. One peculiar problem for business is running out of cash, which consequently leads to failure to make employees' payrolls, or business might be unable to offer services due to absence of essential resources.<sup>1</sup> A well-planned and executed working capital management practices has a significant impact on firm's profitability as well as to manage liquidity powers. The objective of this study is to analyze working capital adequacy and its effect on profitability; to explore the relationship between profitability and liquidity of company. This study aims to present empirical analysis about the effects of working capital management on overall profitability and liquidity of paper mill in Pune city.

**KEYWORDS:** Working Capital Management, Working Capital Cycle, Liquidity Ratios, Profitability Ratios.

<sup>1</sup>GehendraSubedi- Working Capital Management of Nepal Telecom Published, on Aug 05, 2014  
And MahaSagar Publications-Research Writing Company, Mumbai India at 05:31

### INTRODUCTION

The goal of an efficient working capital management strategy is to balance current assets against current liabilities so a company may meet its short-term obligations and maintain operating expenses. Two major components of a working capital management strategy are current assets and current liabilities.

Many businesses can afford to lose money from time to time, but no business can afford to run out of cash. Without cash, you cannot pay your bills -- and if you cannot pay your bills, you are finished. That is why it is so important for businesses to monitor and manage their working capital (Cam Merritt, 2014)

Working capital management means stay on peak of working capital to make sure that cash keeps flowing from end to end of the business (Janet Hunt, 2014). Ultimately, it results in timely recovery of accounts receivable meticulously but not so in a hostile way that the company turns off clientele and jeopardize future turnover. It means strongly monitoring stock levels, tracking which products sell speedily and which ones sell at a snail's pace, which ones sell out (costing a company money in lost sales) and which ones stack on the shelf. It results in to a look for ways to

extend the time before payment of accounts payable, although without having detrimental relationships with vendors.

Ratio analysis is the standard and the most powerful tool of financial investigation. It is a process of establishing and interpreting quantitative relationship between figures and group of figures. Ratios are indicators of financial strength, soundness and position of a firm. It can help the organization to discharge their basic management functions like forecasting, planning, coordinating, control and communication.<sup>2</sup>

Management can reinforce its solvency position; improve its competence and growth in profits by analyzing and interpreting the ratios appropriately. Taking this as fundamental thought, a research work on comparative analysis was undertaken among paper mill in Pune city namely Kay Pulp & Paper Mills Ltd., (hereafter referred as KPPML) at micro level to study and evaluate its current financial position in terms of solvency, liquidity, efficiency and profitability by adopting ratio analysis. An effort been made to evaluate the

<sup>2</sup>Madhavi K, working capital management of paper mills, international journal of research in business management ISSN(e): 2321-886x, vol. 2, issue 3, p1 to p5

financial results based upon the financial statements from April 2012 to March 2014.<sup>2</sup>

## PROFILE OF THE COMPANIE

### Kay Pulp and Paper Mills Limited

Kay Pulp and Paper Mills Limited (KPPML) was incorporated on the 15th of May, 1991 as a Private Limited company and became public limited company on 9th July 1993 promoted by Mr. Niraj Chandra, a third generation entrepreneur from Chandra Family. The Company engaged in manufacturing of MG Kraft Paper. It has an annual capacity of 21000 tones. The Company also has a Power Plant having the generation capacity of 6 M.W.<sup>3</sup>

## RESEARCH METHODOLOGY

This research study based upon empirical research methodology. The primary objective of this paper is to examine the Working Capital Management of Paper mills. Adopting a similar empirical framework first used by Shinand Soenen (1998) and the subsequent work of Deloof (2003) the frame work of the study is determined. The study focuses solely on the Paper mill working in Pune city. The primary data collected by means of individual visit to the manufacturing units and having personal interviews with the concerned officials. Secondary data constitute audited financial statements, statistical returns and company profiles. The financial information reported in this research paper related to the financial periods of (two years) i.e. March 31, 2013 and March 31, 2014.

## REVIEW OF LITERATURE

Several researchers have studied working capital from diverse views and in different environments. The following studies were very appealing and useful for my research:

“It is argues that: an attempt to improve working capital by delaying payment to creditors is counter-productive to individuals and to the economy as a whole. Claims that altering debtor and creditor levels for individual tiers within a value system will rarely produce any net benefit proposes that stock reduction generates system-wide financial improvements and other important benefits.”<sup>4</sup> “Urge those organizations seeking concentrated working capital reduction strategies to focus on stock management strategies based on “lean supply-chain” techniques”. (Rafuse, 1996)

Narasimhan and Murty (2001), focus on improving return on capital employed by targeting some critical areas such as cost containment, reducing investment in working capital and improving working capital efficiency.

<sup>3</sup> <http://www.kaypowerandpaper.com/aboutus.asp>

<sup>4</sup> Bibek Ananda Das “Working capital management in Odisha Power Transmission Corporational Ltd” Jul 10, 2014

The paper mills must initiate necessary steps to utilize its idle cash and bank balances in attractive investments or to pay back in short term liabilities. The low quick ratio may also have liquidity position, if it has fast moving inventories. Unsatisfactory cash ratio leads to financial mismanagement.<sup>5</sup>

Shin & Soenen (1998) and Deloof (2003) have found a strong significant relationship between the measures of working capital management and corporate profitability. According to them profitability can be increased by reducing amount blocked in account receivables and inventories.

Vishanani and Shah (2007) studied the impact of working capital management policies on corporate performance of Indian consumer electronic industry by implemented simple correlation and regression models. They found that no established relationship between liquidity and profitability exist for the industry as a whole; but various companies of the industry depicted different types of relationship between liquidity and profitability, although majority of the companies revealed positive association between liquidity and profitability.<sup>6</sup>

All the above research work give thought about working capital management and its components. They provide the outcome and conclusions of those researches previously conducted on the related area under different countries under diverse environment from dissimilar aspects. Based on these researches, researcher has found a pathway for his research.

## OBJECTIVES OF THE STUDY

The research objectives of the study are:

- To know the concept and importance of working capital management.
- To review the financial performance of paper mill in Pune city through various tools and techniques.
- To confer summary of findings and suggestions.

## FIELD STUDY

For the study financial year 2012-2013 and 2013-2014 are considered. The field examination conducted between May and June 2014. The personal interview method considered. From this interaction, impulsive assistance been acknowledged from company officials. However, there were some hurdles in the collection of data, due to the inclination of people to keep the facts in secrecy, fright about tax judgment, pitiable recall

<sup>5</sup> Madhavi K, working capital management of paper mills, international journal of research in business management ISSN(e): 2321-886x, vol. 2, issue 3, p1 to p5

<sup>6</sup> Dileep Satappa More and Ravi Kiran Maddali, status of supply chain finance in FMCG companies a benchmarking approach. July 2013.

and unwillingness of respondents. These problems partly surmounted by eliciting information through discussions. Further, the researcher has made a few visits to the plants.

### SCOPE OF THE STUDY

The research study was primarily restricted to Kay Pulp & Paper Mills Ltd., (hereafter referred as KPPML). This is an effort to have a micro level empirical analysis in the financial growth and performance of paper mills. The outcome and suggestions provide the guidelines for potential policy formulation and execution for the efficient operation of paper mills operating under various parts of the country. All attempt has been made to complete relevantly and put forward for the best performance in the most appropriate way, keeping in view the economic conditions and related environmental factors.

### LIMITATIONS OF THE STUDY

- This research study is restricted for the two financial year's viz., 2012-2013 and 2013-2014 only.
- Selected ratios under ratio analysis computed based on historical financial statements.
- The absolute figures calculated under ratio analysis may exhibit in attractive expression of ratio, which is principally quantitative analysis and not qualitative analysis.

### OPERATING PROFIT STATEMENT

Particulars	KPPML	KPPML
	2013-2014	2012-2013
	Amt in Rs.	Amt in Rs.
Net sales	277,007,624	254067477
Cost of goods sold	209,615,593	184187300
Gross profit on sales	67392031.00	69880177.00
Total operating expenses	67762584	70208318
Other income	1038182	930741
Income before income tax	667629	602600
Income tax	0	0
Net income	667629	602600
GP ratio	24.33	27.50
NP ratio	0.24	0.24

Source: Annual Reports

### Interpretation

KPPML is operating on a small scale with horizontal expansion. However, it constantly maintain its GP ratio. Maintain consistently high GP ratio for a long term is good for the business. As a qualitative measure it is achieved by mill by standardizing its production process, controlling its cost and reducing its wastage. Further mill followed cost control tools for controlling the direct cost of production. However, mill is struggling hard to make improvement in NP ratio. NP ratio was very poor because of huge expenses on the items viz. cost of material consumed, Power & Fuel, Dealer Discount yet, it was constant throughout the period.

### WORKING CAPITAL CYCLE

The working capital cycle (WCC) is the amount of time it takes to turn the net current assets and current liabilities into cash. The longer the cycle is, the longer a business is tying up capital in its working capital without earning a return on it. (Carvalho, Apr 27, 2013 ) The following table depicts working capital cycle of KPPML for the financial year 2012 - 2014

Particulars		KPPML	KPPML
		2013-2014	2012-2013
Working Capital Cycle		In days	In days
Average time raw material are in stock		88.37	91.39
Time taken to produce goods	+	-4.15	-1.30
Time taken by customers to pay for goods	+	27.13	28.17
Period of credit taken from suppliers	-	28.71	40.00
<b>Working Capital Cycle in days</b>		<b>82.63</b>	<b>78.26</b>

Source: Annual Reports

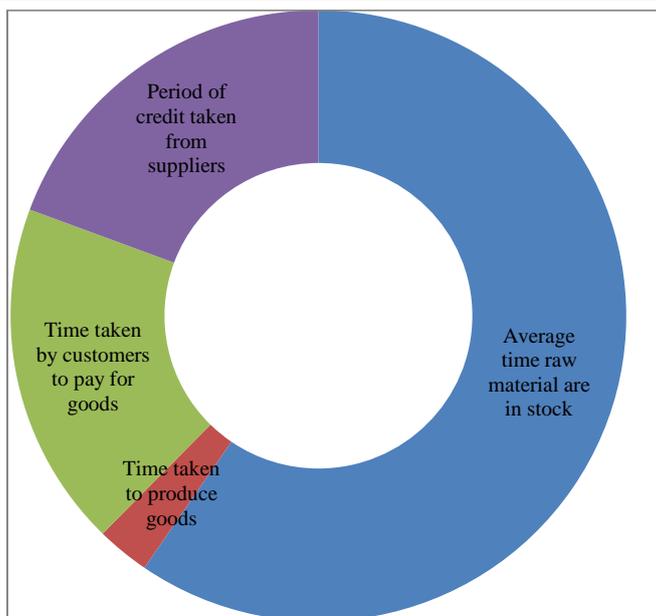


Figure 1- Working capital cycle of KPPML for 2014

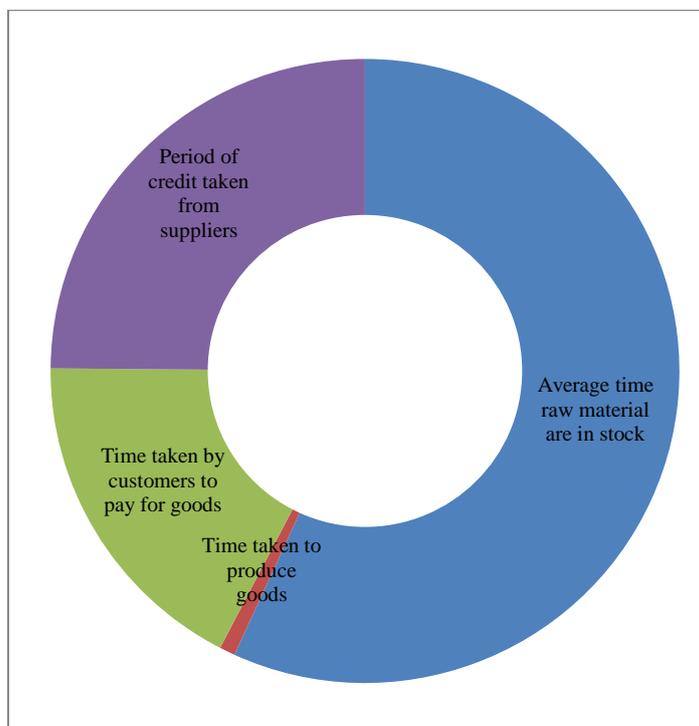


Figure 2- Working capital cycle of KPPML for 2013

**Interpretation**

**Average time raw materials are in stock:** It shows that mill required more time to convert their current assets in to cash. The mill is almost maintaining this ratio constantly. 88 days and 91 day respectively may reveals bad inventory control management. Almost for 3 months raw material kept at stock room shows ineffective inventory handling. Means raw materials averagely are on the shelf almost for 3 months in its inventory department shows inefficient funds management.

**Time taken to produce goods:** It was negative which reflects that the finished products were laying in warehouse being convert it into actual sales. Ultimately reflects blocking of funds in finished products. It is a bad sign for the business. It means mill failed to achieve its sales target. Mill’s production process might not working in up to its optimise level because times taken to produce goods for two financial years are negative..

**Time taken by customers to pay for goods:** Mill is not extending their credit period, which is a good sign for maintain positive cash flow. Mill is rigorously following the recovery time schedule offered to their customers. It will definitely improve the liquidity position for the mill.

**Period of credit taken from suppliers:** For mill, it shows the good scenario; only for 1-month suppliers, payments are due. It will help the mill to maintain its solvency position for short as well as long term. However, KPPML are extending their credit payment period, will question about the short-term credit worthiness of the mill.

**Working Capital Cycle in days:** From the above tables it is observed that KPPML's working capital cycle is longer. It results in unnecessary blocking up funds in its working capital without earning a return on it. It means mills require working capital almost for 3 months, which is a quite a high period for a mill to maintain its cash position intact.

## WORKING CAPITAL REQUIREMENT

Sr.no	Particulars	KPPML	KPPML
		2013-2014	2012-2013
		Amt in Rs.	Amt in Rs.
1	Total operating expenses in Rs.	67762584	70208318
2	Working capital cycle in days	82.63	78.26
3	No. of operating cycles in the year	4.42	4.66
4	Working capital requirement in Rs.	15340972	15053944
5	Total Current Assets	84,413,563	74,537,130
6	Total Current Liabilities	17,985,223	21,380,998
7	Actual working capital	66,428,340	53,156,132
8	<b>Variance (4 - 7)</b>	<b>-51,087,368</b>	<b>-38,102,188</b>

Source: Annual Reports

### Interpretation

It shows very critical situation for KPPML, Working capital requirement was negative though actual investment in working capital was Rs. 66428340 and Rs. 53156132 respectively. It might be the most dangerous situation for the mill to cope with short-term solvency and maintain credit worthiness among the suppliers. It reveals inadequate working capital maintain by mill will result a serious trouble in the near future. Mill might have to forgo expansion opportunities for its development and growth because of inconsistent investment in the working capital for over the period.

### RATIO ANALYSIS

Ratio analysis is a mathematical relation expressed between two inter-connected accounting figures. It may be expressed in times or percentages. They are useful only when they exhibit in comparative form. Moreover, ratios are only indicators. They cannot be taken as final regarding good or bad financial position of the business other things have also to be seen.<sup>7</sup> While making inter-firm (comparison of one firm with another) or intra-firm (Comparison within the firm itself) comparison based on accounting ratio, it must be seen that the different firms or departments, which are being compared, have the same accounting policies and adopt the same accounting procedures.

The stakeholders of a company are principally concerned in understanding the company's ability to meet its current or short-term obligations as and when these become due. A firm must make sure that it does not undergo of liquidity or capacity to pay its current obligations, which is goodwill to the company. This can be recognizing by liquidity position. This research paper, deal with a significant assessment and analytical understanding of the financial performance of Kay Pulp & Paper Mills Ltd., as a comparative study relating to short-term solvency.

For this study ratio, analysis tool is applied. Following are the concern ratios considered for analyzing the financial performance of the said companies.

<sup>7</sup> Roshni Bhatia, *limitations of ratio analysis*, January 30, 2012

Sr.no	Particulars	KPPML	KPPML
		2013-2014	2012-2013
	<b>Liquidity ratios</b>		
1	Current ratio	4.69 : 1	3.49 : 1
2	Quick ratio	1.26 : 1	0.98 : 1
3	Absolute liquid ratio	0.11 : 1	0.07 : 1
	<b>Activity ratios</b>		
4	Trade payable days	28.71	40.00
5	Trade receivable days	27.13	28.17
6	Inventory days	107.58	106.01
7	Inventory turnover in days	62.96	101.82
8	Working capital cycle in days	78.26	82.63
9	Asset turnover ratio	158.62%	169.31%
10	Working capital turnover ratio	23.98%	20.92%
11	Fixed asset turnover ratio	120.94%	133.00%
12	Net working capital ratio	15.12%	12.36%

Source: Annual Reports

### Interpretation

- **Current ratio:** As a predictable norm, a current ratio of 2:1 is considered as reasonable. This thumb rule should not blindly be followed because, small current ratio indicates that the unit may not be having enough funds to pay off liabilities or it may be trading beyond its capability. Current ratio of KPPML is high, may not be positive because of slow moving stocks, stocks may heap up due to poor sale, debt collection may not be reasonable, cash and bank balances may be lying inactive because of lacking investment opportunity. This ratio is high as compared to industry standard also. It shows that the funds of KPPML are much blocked in current asset on the contrary; their working capital cycle is narrow.
- **Quick ratio (Acid test ratio):** Quick ratio is more precise test of liquidity than current ratio. It establishes the connection between quick or liquid assets and quick liabilities. Quick assets mean current assets as reduced by inventory and prepaid expenses. Quick liabilities refer to current liabilities as reduced by bank overdraft, on the argument that bank overdraft generally permanent way of financing and not subject to called on demand. The quick ratio of mill is not up to the industrial standard, which is 1: 1, means the company may fulfill their temporary requirement of funds for the payment of current liabilities through short-term borrowings. It will question about the short-term liquidity position of the mill. If the mill maintains the intact ratio, which will help the mill to maintain solvency position in the market.
- **Absolute liquid ratio (Cash ratio):** Cash is the liquid asset. The association between cash and cash at bank and short term marketable

securities with current liabilities is examined to know the immediate solvency. Even though receivables, debtors and bills receivable are usually more liquid than inventories, yet there may be uncertainties regarding their realization into cash immediately or in given time. This ratio of the mill is adverse, may result in short-term insolvency. In critical situations, mills will pose serious problems of liquidity.

- **Trade payable days:** It reveals that, KPPML are operating on suppliers' fund because nearly for one and half month supplier's payments were delayed for their supplies. Unfortunately, mill is continuously following the same policy for over the period. However, this shows that company made unnecessary investment in stock of raw materials. On the other hand, KPPML are extending their credit payment terms, over the period of time, which may adversely affect on the liquidity position for long run.
- **Trade receivable days:** KPPML are deliberately following consistent credit receivable terms, which is a good sign and definitely maintain good rapport with the customers. Mill is keeping the constant ratio reveals favorable situation for the mill as far as liquidity position is concerned.
- **Inventory days:** Having high inventory days by KPPML, results in holding the investments in stock may adversely affect on solvency and profitability of the mill. It means mill's funds are blocked in the inventory may pose a critical problem of solvency in short term.
- **Inventory turnover in days:** KPPML inventory turnover is slow. It shows that mill is unable to generate sales effectively. Unfortunately results in inoperative activities coordinated by the mill. However, KPPML

takes approx. 100 days to turnover their stock. It shows slow moving business operations may pose a critical situation in near future for the mill.

- **Working capital cycle in days:** It is observed that KPPML's working capital cycle is lengthy. It results in improper handling of the issues of working capital managed by the mill. This longer cycle, also results in unnecessary blocking up of funds in working capital without earning a return on it.
- **Asset turnover ratio:** KPPML's ratio is very high, showing that the mill utilizes its investments in their total assets up to the mark. It resulted in generating a considerable amount of turnover for the mill. KPPML is using their all-total assets to their maximum extent to gear up the turnover.
- **Working capital turnover ratio:** It shows that working capital investment of KPPML is more. It results in blocking of funds as well as may suffer a critical situation in the near future for the mill.
- **Fixed asset turnover ratio:** Though having a huge investment in fixed assets resulted in boosting the turnover for the mill. Means KPPML made requisite investment in fixed assets and optimally using it for increasing the turnover.
- **Net working capital ratio:** Usually, working capital is openly associated to turnover. Net

working capital is the differentiation among current assets and current liabilities. This ratio is resulting by dividing net working capital with net assets. It reveals from the above table that KPPML adequately generates required short-term finance by maintaining turnover intact.

### CONCLUSION

From the analysis above, all the indicators of financial analysis from the year 2012 show insignificant use of working capital by both the mills. However, the management requires to significantly trim down the dependence on borrowings and rather source for funds in the capital market, which in the long run will be beneficial to the company, and will reduce pressure on their cash flow which will also strengthen its working capital position, so as to meet its obligations as when due (Akinwande, 2009). From the above study we can consider that, all the management of KPPML must instigate essential steps to utilize its inactive cash and bank balances in smart investments or to pay back in short-term liabilities (current ratio). The quick ratio may also have a liquidity position, if it has quick stirring inventories and is more acceptable in KPPML. Cash ratio is also not suitable, needs the consideration of the management to encourage effectual deployment of cash and bank balances.

### References:

- Akinwande, G. S. (2009). Working capital management in telecommunication sector - a case study of Vgc Telecoms. *School of Management*, 63.
- Allcock, J. B. (1994). Seasonality. In L. M. S. Witt, & ass (Ed.), *Tourism marketing AND management handbook* (pp. 86-92). New York: Prentice Hall.
- Butler, R. (1998). Seasonality in tourism: Issues and implications. *Tourism Review*, 53(3), 18-24.
- Cam Merritt, D. M. (2014). What Is Working Capital Management and Why Do Companies Need to Manage It? *Small Business*, 1.
- Carvalho, J. (Apr 27, 2013 ). Working Capital Cycle (WCC). *Divestopedia explains*, 2.
- Department of Economics and Statistics. (2012). *Economic Survey of Himachal Pradesh*. Government of Himachal Pradesh.
- Jafari, J. (Ed.). (2013). *Encyclopedia of tourism*. Routledge.
- Jain, T. R., & Ohari, V. K. (2006). *Statistics for Economics*. FK Publications.
- Janet Hunt, D. M. (2014). *Describe the Two Major Components of a Working Capital Management Strategy*. small business by demand media.
- Rafuse, M. E. (1996). "Working capital management: an urgent need to refocus" *Management Decision*, . MCB UP Ltd.