IMPACT: International Journal of Research in Business Management (IMPACT: IJRBM)
ISSN(E): 2321-886X; ISSN(P): 2347-4572
Vol. 2, Issue 3, Mar 2014, 63-72

WORKING CAPITAL MANAGEMENT OF PAPER MILLS

K. MADHAVI

Assistant Professor, Maharani's Arts, Commerce and Management College for Women, Bangalore, Karnataka, India

ABSTRACT

A well designed and implemented working capital management has a significant contribution for firm's profitability as well as to maintain liquidity powers. The purpose of this study is to assess working capital adequacy and its impact on profitability; to investigate the relationship between profitability and liquidity of firms. Working capital refers to the firm's investment in short term assets. The management of working capital is important to the financial health of business of all sizes. The amounts invested in working capital are often high in proportion to the total assets employed and so it is vital that these amounts are used in an efficient way. The management of working capital affects the liquidity and the profitability of the corporate firm and consequently its net worth (Smith, 1980). Working capital management therefore aims at maintaining a balance between liquidity and profitability while conducting the day to day operations of business concern. Inefficient working capital management not only reduces the profitability of business but also ultimately lead to financial crises, Chowdhury and Amin (2007). The study aims to provide empirical evidence about the effects of in current assets and current liabilities of Andhra Pradesh Paper Mills Limited and Seshasayee Paper Mills Limited.

KEYWORDS: Working Capital, Liquidity Ratio, Short Term Liquidity Position, Current Ratio, Acid Test Ratio Cash Ratio, Current Liabilities and Current Assets

INTRODUCTION

Today, every management is desirous to know their financial strength to make best se of available resources to the maximum extent and able to sort out its weaknesses to initiate and adopt suitable corrective actions to improve its industrial operations in terms of solvency, efficiency and profitability. The management can adopt various techniques like, trend analysis, common size statements, comparative statements, schedule of changes in working capital, fund flow statements, cash flow statements, cost-volume- profit analysis and ratio analysis for its financial evaluation and performance.

Ratio analysis is recognized as one of the most powerful tool of financial analysis. It is a process of establishing and interpreting quantitative relationship between figures and group of figures. Ratios are indicators of financial strength, soundness, position and weakness of a firm. Ratio can assist the management in its basic functions like forecasting, planning, coordinating, control and communication. If ratios are properly analyzed and interpreted the management can strengthen its solvency position, improve its efficiency and growth in profits.

Taking this as central idea, a research work on comparative analysis was undertaken on Andhra Pradesh Paper Mills Ltd., (hereafter referred as APPML) and Seshasayee Paper and Boards Ltd., (hereafter referred as SSPBL) at micro level to examine and evaluate its current financial position in terms of solvency, liquidity, efficiency and profitability by adopting Ratio Analysis. An attempt has been made to analyze the financial results basing on the financial statements from 1st April 2002 to 31st March 2011.

RESEARCH METHODOLOGY

The primary aim of this paper is to investigate the impact of Working Capital Management on profitability of Paper mills. This is achieved by developing a similar empirical framework first used by Shinand Soenen (1998) and the subsequent work of Deloof (2003). The study focuses exclusively on the Paper mills limited. The data reported in this paper were collected for a period of 2002 to 2011. As a part of study designed to analyze profitability and working capital management from financial reports. And the primary data was collected by means of personal visits to the manufacturing unit and having private interviews with the officials concerned and the secondary data constitutes audited financial statements, broachers, bulletins, statistical returns and company profiles.

REVIEW OF LITERATURE

Many researchers have studied working capital from different views and in different environments. The following study were very interesting and useful for our research: According to Eljelly, 2004, working capital management requires planning and controlling current assets and current liabilities in such a way that eradicate the threat of inability to meet short term t short term liabilities and evade excessive investment in these assets.

According to Eljelly, 2004, working capital management requires planning and controlling current assets and current liabilities in such a way that eradicate the threat of inability to meet short term liabilities and evade excessive investment in these assets. 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. 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. Further, the study was found to be more significant in case of small growing firms. Amit, Mallik, Debashish and Debdas (2005) in their study regarding the relationship between working capital and profitability of Indian pharmaceutical industry found and concluded that no definite relationship could be established between liquidity and profitability. 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. Reheman and Naser (2007) found in their study negative relationship between profitability and liquidity of firms and also Ganesan (2007) studied working capital management efficiency in Telecommunication equipment industry and the study revealed significant statistical evidence and negative relationship between profitability and liquidity. Bhunia (2007) studied liquidity management of public sector Iron and Steel enterprise in India.

He has found that the actual values of working capital lower than the estimated value of working capital for both companies under study and poor liquidity position in case of both companies. All the above studies provide base and gives idea regarding working capital management and its components. They also give us the results and conclusions of those researches already conducted on the same area for different countries and environment from different aspects. On basis of these researches done in different countries, researcher has developed own methodology for research.

OBJECTIVES OF THE STUDY

The specific objectives of the study are:

- To review the concept and importance of working capital and the concept of ratio, utility of ratio analysis, compiling of ratios.
- To evaluate the financial performance through Ratio Analysis of Andhra Pradesh Paper Mills Ltd., and Seshasayee Paper and Boards Ltd., on comparative basis in terms of short term.
- To discuss summary of findings in form of conclusions and suggestions for effective functioning of Andhra Pradesh Paper Mills Ltd., and Seshasayee Paper and Boards Ltd.,

PLAN OF ANALYSIS

The primary data collected through discussions and the secondary data obtained from published sources have been processed in tune with the objectives and relevant tables were prepared. In the analysis of data standard statistical techniques like percentages and averages have been used.

FIELD STUDY

The reference period for the study was 1st April 2002 to 31st March 2011. The field investigation was conducted from 1st April 2012 to June 2012. The personal interview method was adopted. In this regard, spontaneous help has been received from officials. However, there were few problems in the collection of information, owing to the tendency of people to keep the facts in secrecy, fear about tax assessment, poor memory and reluctance of respondents. These problems were partly over came by eliciting information through discussions. The scholar has made quite a few visits to the plants at regular intervals.

SCOPE OF THE STUDY

The present comparative study was mainly confined to Andhra Pradesh Paper Mills Ltd., and Seshasayee Paper and Boards Ltd., This is an attempt to have a micro level imperial analysis in the financial progress and performance of paper mills. The findings and suggestions throw light on the guidelines for future policy formulation and implementation for the effective functioning of paper mills in other districts of the state and the country also. Every effort has been made to conclude relevantly and suggest for the best performance in the most adoptable way, keeping in view the market and production levels.

LIMITATIONS OF THE STUDY

The ratios have been calculated, analyses and interpreted for the period under study i.e. From 1st April 2002 to 31st March 2011. Ratios are computed on the basis of historical financial statements. Hence, future performance of the manufacturing units not reflected. The financial statements are subject to window dressing. It will affect the results in the process of analysis. The absolute figures may prove decorative as ratio analysis is primarily quantitative analysis and not qualitative analysis. Many people may interpret the results in different ways as ratio is not an end by itself. Anyhow, every effort has been made to draw conclusions to all firms facing similar situations. But non- availability of certain financial data makes difficulty on comparative analysis.

Ratio Analysis

The short term creditors of a company are primarily interested in knowing the company's ability to meet its current or short-term obligations as and when these become due. A firm must ensure that it does not suffer from lack of liquidity or capacity to pay its current obligations which is a goodwill to the company. And this can be known by liquidity position. This paper deals with a critical evaluation and analytical interpretation of the financial performance of Andhra Pradesh Paper Mills Ltd (APPML) and Seshasayee Paper Boards Ltd (SSPBL) as a comparative study relating to short-term solvency for the study period from 2002 to 2011. This study of solvency is now analyzed by adopting short-term liquidity position.

Short Term Liquidity Position

- **Current Ratio (Working Capital Ratio)**

This ratio measures the general liquidity position in short term by establishing relationship between current assets and current liabilities. A relatively high current ratio is an indication that the firm presumed to be liquid and has the ability to pay its current obligations in time. A relatively low current ratio represents, the liquidity position of the firm is not satisfactory and it may not be able to pay current obligations. The formula to calculate current ratio is as follows.

Current Ratio (WCR) = Current Assets / Current Liabilities

The statistical data relating to calculation of current ratio was computed through the financial statements referred in their respective annual reports of APPML and SSPBL for the study period from 2002-03 to 2010-11 are depicted in the below table.

Table 1: Assets and Current Liabilities of APPML & SSPBL 2002 to 2011(Rs. in Lakhs)

Year	Andhra Pradesh Paper Mills Ltd.			Seshasayee Paper Boards Ltd.		
Ending 31st March	Current Assets	Current Liabilities	Ratio	Current Assets	Current Liabilities	Ratio
2002-03	13866	7983	1.74 : 1	14192	7879	1.80 : 1
2003-04	15234	8112	1.88 : 1	15171	10492	1.45 : 1
2004-05	15300	8771	1.74 : 1	17250	12229	1.41:1
2005-06	15602	14487	1.08 : 1	17919	12703	1.41:1
2006-07	18165	12562	1.45 : 1	21512	14010	1.54:1
2007-08	22010	13344	1.65 : 1	23535	16631	1.42:1
2008-09	23901	15975	1.50 : 1	21246	11819	1.80:1
2009-10	24835	12840	1.93 : 1	22709	10584	2.15:1
2010-11	28986	14455	2.00 : 1	36715	11022	3.33:1

* **Source:** Annual Reports

Interpretation

As a conventional rule, a current ratio of 2:1 is considered satisfactory. This rule of thumb should not blindly be followed because, low current ratio indicates that the unit may not be having sufficient funds to pay off liabilities or it may be trading beyond its capacity. Higher current ratio may not be favorable because of slow moving stocks, stocks may pile up due to poor sale, debt collection may not be satisfactory, cash and bank balances may be lying idle because of insufficient investment opportunities. This ratio is below the accepted standard norm both in APPML and SSPBL in the entire study period, excepting 2010-11 in APPML, 2009-10 and 2010-11 in SSPBL. It clearly indicates, the normal general accepted solvency to meet their current obligations in time is not satisfactory during 2002-2009. This ratio just reached at standard in 2010-11 in APPML compared with previous years. It was noticed from 2008-09 the percentage of the cash and bank balances, loans and advances in total assets were increased as against a short fall in value of inventories in 2009-10 in APPML. A moderate decrease in current liabilities percentage in total liabilities are identified in 2009-10 and subsequent increase in 2010-11. The percentage of loans and advances were increased rapidly from 4.09 in 2008-09 to 5.74 in 2009-10 and 27.60 in 2010-11 in SSPBL. In both firms the current ratio is stable with effect from 2009-10 which indicates the short term financial position is quite satisfactory. However, the management of APPML must initiate necessary steps to utilize its idle cash and bank balances in attractive investments or to pay back its short term liabilities.

- **Quick Ratio (Acid Test Ratio)**

Quick ratio is more rigorous test of liquidity than current ratio. It establishes the relationship between quick or liquid assets and quick liabilities. Quick assets means current assets as reduced by inventory and prepaid expenses. Quick liabilities refers to current liabilities as reduced by bank overdraft, on the argument that bank overdraft generally permanent way of financing and not subject to be called on demand. However, quick assets and current liabilities have been used for calculation of quick ratio. The formula to calculate quick ratio is as follows.

Quick Ratio = Quick Assets / Current Liabilities

The statistical data relating to calculation of quick ratio obtained through the financial statements referred in their respective annual reports of APPML and SSPBL for the study period from 2002-03 to 2010-11 and are depicted in the below table.

Table 2: Quick Assets and Current Liabilities of APPML & SSPBL 2002 to 2011 (Rs. in Lakhs)

Year	Andhra Pradesh Paper Mills Ltd.			Seshasayee Paper Boards Ltd.		
Ending 31st March	Quick Assets	Current Liabilities	Ratio	Quick Assets	Current Liabilities	Ratio
2002-03	5888	7983	0.74:1	11393	7879	1.45:1
2003-04	6530	8111	0.80:1	10829	10491	1.03:1
2004-05	6675	8771	0.76:1	12556	12230	1.03:1
2005-06	7509	14487	0.52: 1	12924	12703	1.02:1
2006-07	9218	12562	0.73: 1	16016	14011	1.14:1
2007-08	11529	13344	0.86: 1	16482	16631	0.99:1
2008-09	10376	15975	0.65: 1	14.41	11818	1.22:1
2009-10	13248	12841	1.03: 1	17928	10583	1.69:1
2010-11	16879	14456	1.17: 1	32227	11021	2.92:1

* **Source:** Annual Reports

Interpretation

A quick ratio of 1:1 is considered to represent a satisfactory current financial condition. A quick ratio of 1:1 does not necessarily mean satisfactory liquidity position, if all debtors can not be realized and cash is needed immediately to meet current obligations. A low quick ratio does not necessarily mean a bad liquidity position as inventories are not a absolutely non-liquid. It is observed from the above data the quick ratio is less than the accepted norm in APPML from 2002-03 to 2008-09, whereas it is just above the standard in SSPBL Further the quick ratio is above the standard in APPML from 2009-10 to 2010-11.

In SSPBL this ratio is at standard from 2002-03 to 2006-07 with a slight fall in 2007-08. Thereafter it is increasing progressively. It is noticed in the composition of current assets, the percentage of inventory in total assets is high in proportion in APPML compared to SSPBL considering other current assets like debtors, loans, advances, cash and bank balances. The low quick ratio may also have liquidity position, if it has fast moving inventories. Therefore, quick ratio is more satisfactory in SSPBL with APPML in the entire study period.

- **Cash Ratio (Absolute Liquid Ratio)**

Cash is the most liquid asset. The relationship between cash including cash at bank and short term marketable securities with current liabilities is examined to know the immediate solvency. Although receivables, debtors and bills receivable are generally more liquid than inventories, yet there may be doubts regarding their realisation into cash immediately or in given time. The formula to calculate the cash ratio is as under.

Cash Ratio = Cash* + Marketable Securities / Current Liabilities.

* Cash means, cash in hand and cash at bank.

The statistical data relating to calculation of cash ratio obtained through the financial statements referred in their respective annual reports of APPML and SSPBL for the study period from 2002-03 to 2010-11 and are depicted in table 3 with its graphical representation.

Table 3: Cash +Marketable Securities and Current Liabilities of APPML & SSPBL 2002 to 2011 (Rs. in Lakhs)

Year	Andhra Pradesh Paper Mills Ltd.			Seshasayee Paper Boards Ltd.		
Ending 31st March	Cash and Bank Balance	Current Liabilities	Ratio	Cash and Bank Balance	Current Liabilities	Ratio
2002-03	564	7983	0.07: 1	4603	7879	0.58 : 1
2003-04	795	8112	0.10: 1	4789	10492	0.46 : 1
2004-05	612	8771	0.07: 1	5957	12230	0.49 : 1
2005-06	777	14487	0.05: 1	6189	12703	0.49 : 1
2006-07	972	12563	0.08: 1	7210	14011	0.51: 1
2007-08	1329	13345	0.10: 1	80456	16631	0.48 : 1
2008-09	807	15975	0.05: 1	6441	11818	0.54 : 1
2009-10	1376	12841	0.11: 1	9168	10583	0.87 : 1
2010-11	2068	14456	0.14: 1	2884	11021	0.26 : 1

* **Source:** Annual Reports

Interpretation

The ideal cash ratio is 1:2 or 0.5 or 50 percent. This ratio in APPML is less than the standard and not encouraging for the entire study period i.e. 2002-03 to 2010-11. The cash ratio is above the standard in SSPBL in 2002-03 and a sharp decrease upto 2005-06, thereafter sturdily increased to 87 percent in 2009-10. But subsequently it has fallen to 26 percent in 2010-11, which is less than the standard.

The percentage of cash and bank balances in total assets in APPML was 1.27 in 2002-03, reduced to 0.90 percent in 2005-06 and thereafter with increasing trend reached to 1.71 percent in 2010-11. Similarly, in SSPBL the cash and bank percentage in total assets was 13.98 percent in 2002-03 increased to 15.06 percent in 2005-06, reduced to 12.34 percent and 3.30 percent in 2009-10 and 2010-11 respectively. Hence, cash ratio is not satisfactory particularly in APPML as compared with SSPBL. It needs the attention of the management to introduce sufficient effective measures for proper maintenance of working capital needs by utilizing available cash and cash at bank balances.

- **Net Working Capital Ratio**

Working capital is very much required sufficiently for any organization for effective functioning of its operations successfully. Generally, working capital is directly related to sales. Net working capital is the difference between current assets and current liabilities. This ratio is calculated by dividing net working capital with net assets. Net assets represents aggregation of net fixed assets, current assets, value of capital works-in- progress and investments. High net working capital ratio is not a good sign. This ratio can be calculated by using the following equation.

Net Working Capital Ratio = Net Working Capital / Net Assets.

The statistical data relating to net working capital ratio obtained through the financial statements referred in their respective annual reports of APPML and SSPBL for the study period from 2002-03 to 2010-11 and are presented in the table.

Table 4: Net Working Capital and Net Assets of APPML and SSPBL 2002 to 2011 (Rs. in Lakhs)

Year	Andhra Pradesh Paper Mills Ltd.			Seshasayee Paper Boards Ltd.		
Ending 31st March	Net Working Capital	Net Assets	Ratio	Net Working Capital	Net Assets	Ratio
2002-03	5882	43471	0.14:1	6313	32952	0.19:1
2003-04	7122	44236	0.16:1	4679	34381	0.14:1
2004-05	6528	48118	0.14:1	5021	40549	0.12:1
2005-06	1115	85748	0.01:1	5216	41100	0.13:1
2006-07	5602	103752	0.54:1	7502	57596	0.13:1
2007-08	8665	110065	0.08:1	6903	74806	0.09:1
2008-09	7926	115899	0.07:1	9427	74860	0.13:1
2009-10	11995	116895	0.10:1	12126	74306	0.16:1
2010-11	14531	120156	0.12:1	25694	87383	0.29:1

* **Source:** Annual Reports

Interpretation

The net working capital ratio in APPML was steady during 2002-03 to 2004-05. It was increased to 54 percent in 2006-07 which was ever highest due to abnormal increase in current liabilities in the relevant period. Thereafter, this ratio varies from 8 percent to 12 percent from 2007-08 to 2010-11. This ratio was between 12 percent to 19 percent in SSPBL between 2002-03 to 2006-07 and later reduced to 9 percent in 2007-08.

Thereafter, it was steady between 13 percent to 29 percent during 2008-09 to 2010-11. The percentage of current assets in total assets was at 31.35 in APPML in 2002-03 reduced to 17.45 percent in 2006-07 and registered a moderate increase upto 24.12 percent in 2010-11. The current liabilities percentage in total liabilities was 18.05 in 2002-03, reduced to 12.07 percent in 2006-07 and 12.03 percent in 2010-11.

In SSPBL the current assets percentage in total assets was 43.07 in 2002-03, reduced to 37.35 percent in 2006-07 and with fluctuations reached at 42.02 percent in 2010-11. The percentage of current liabilities in total liabilities was at 23.92 in 2002-03 increased to 30.91 in 2005-06, thereafter with declining trend reached to 12.61 percent in 2010-11. It was observed that the percentage of investment was at 8.25 in APPML in 2002-03 declined to 1.39 percent in 2010-11 as against 2.19 percent in 2002-03 in SSPBL reached to 2.66 percent in 2010-11.

This means the units are spending working capital sources for capital investment proposals, not a good sign for effective organization of funds in the long period of time. It is advisable to utilize the existing cash and bank balances to pay off its current obligations every year instead of purchasing or incurring capital expenditure.

CONCLUSIONS

From the above study we can analyze that, the management of APPML must initiate necessary steps to utilize its idle cash and bank balances in attractive investments or to pay back in short term liabilities.(current ratio). The low quick ratio may also have liquidity position, if it has fast moving inventories and is more satisfactory in SSPBL with APPML. Cash ratio is not satisfactory in APPML as compared to SSPBL and it needs the attention of the management to induce effective utilization of cash and bank balances.

REFERENCES

1. Amit, K., Mallik, D. s., & Debdas, R. 2005. Working Capital and Profitability: A Study on Their Relationship with Reference to Selected Companies in Indian Pharmaceutical Industry. GITAM Journal of Management.
2. Banerjee, B.(1995). "Financial Policy & Management Accountancy", 5th Edition, The World Press Private Ltd., Kolkata, pp.74-146.ent, 3(2), 51 - 62.
3. Mukhopadhyay, D.(2004). "Working Capital Management in Heavy Engineering Firms- A Case Study", the Management Accountant, I.C.W.A.I.
4. Khan, M.Y. and Jain, P.K. (2004). "Financial Management", 2nd Edition, Tata McGraw Hill.
5. Rajeswara, Rao K. (1985):"Working Capital Planning and Control in Public Enterprises in India", Ajanta Publications, Jaipur.
6. Mohan, Reddy P. (1991): "Management of Working Capital", Print well Publishers.
7. Bhunia, Amalendu. 2007. Liquidity Management of Public Sector Iron and Steel Enterprise in India. Vidyasager University Journal of commerce, 12.
8. Chowdhury, A., & Amin, M. 2007. Working capital Management Practiced in Pharmaceutical Companies listed in Dhaka Stock Exchange. BRAC university Journal, 4(2), 75 -86.
9. Mehar, A. 2001. Impacts of Equity Financing on Liquidity Position of a Firm Applied Financial Economics, 15, 425-438.
10. Gujarati, D. N. & Sangeettha. 2003. Basic econometrics, (4th Edition). New Delhi, India: The McGraw- Hill Publishing Company Limited.
11. Singh, P. K. 2004. Working Capital Management in Lupin Laboratories ltd. A Case Study. The Management Accounting, 4.
12. Vishnani, S., & Shah, B. K. 2007. Impact of Working Capital Management Policies on Corporate Performance An Empirical Study. Global Business Review, 8(2), 267- 2816.13.
13. Anand, Manoj and Malhotra, Keshav (2007): Working Capital Performance of Corporate India – An Empirical Study", ICFAI Journal of Applied Finance, Vol.13, No.1, January Issue, pp.46-81.

14. Pandey, I. M. and Parera, K.L.W. (1997): Determinants of Effective Working Capital. Management – A Discriminate Analysis Approach", IIMA Working Paper # 1349, Research and Publication Department, Indian Institute of Management, Ahmadabad, India.
15. Sarawat, B. P. and Agarwal, R.S. (2004): "Working Capital Trends of Cement Industry in Nepal", Indian Journal of Accounting, Vol. XXXV (1), December Issue, pp.26- 35.

AUTHOR DETAILS

Mrs.K.Madhavi, Assistant Professor is working at Maharani's Arts, Commerce and Management college for Women, Bangalore. She has completed her M. Com., M. Phil in Sri Krishnadevaraya University, Anantapur, A.P She has been continuously importing his knowledge to several students for the last Five Years. She has published a Book for BBM 1st Sem in the Fundamental of Accounting. She has published Four paper presented in UGC Sponsored various state and Nation.