

Working Capital Management in International Paper APPM Ltd-An Empirical Study

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Abstract: *The management of current assets, current liabilities and inter-relationship between them is termed as working capital management. Working capital management is concerned with problems that arise in attempting to manage the current assets, the current liabilities and the inter-relationship that exist between them." In practice, "There is usually a distinction made between the investment decisions concerning current assets and the financing of working capital." "The goal of working capital management is to ensure that a firm is able to continue its operations and that it has sufficient ability to satisfy both maturing short term debt and upcoming operational expenses. The management of working capital involves managing inventories, accounts receivables and payables and cash".*

Keywords: *Working Capital, Current Assets, Current Liabilities, Quick Ratio, Current Ratio*

I. INTRODUCTION

Working capital management refers to efficient management of short term assets. There is a direct relationship between a firms' growth and its working capital needs. The firm needs to invest more in components of working capital with increase in sales. So, the finance manager should be aware of such needs and finance them quickly. Financial manager should pay special attention to the management of current assets on a continuing basis to curtail unnecessary investment in current assets, and in turn, to manage working capital in the best possible way to get the maximum benefit. The management should be prompt to initiate an action and correct imbalances to maintain the liquidity position of the firm. Working capital indicates the liquidity position of the firm and suggests the extent to which the working capital maintained. It should be sufficient to meet with its current obligation. It should constitute a margin or a buffer for maturing obligation within the ordinary operating cycle of a business.

Investment in current assets should be just adequate to the needs of the firm. Excessive investment in current assets should be avoided as it reduces the firms' profitability, as idle investment earns nothing. On the other hand, inadequate amount of working capital can threaten the financial solvency of the firm because of its inability to meet its current obligation and make the company unsafe and unsound. This kind of financial health may prove harmful to the company's reputation.

There are three important ratios, to understand the working capital management. 1. Current assets to Total Assets Ratio: This method is based on operating cycle period. Here, the working capital requirement can be compare with its total assets. 2. Ratio to sales method: The working capital requirements are estimated as a ratio of sales for each component of working capital. 3. Ratio of fixed assets and working capital: The working capital is estimated as a percentage of fixed investment. The effectiveness of working capital is measured on certain parameter i.e., Current Assets to Total Assets, Current Assets to Fixed Assets, working capital to sales. To know about the income generation capacity of a company, gross profit ratio is not sufficient. A major part of fund is also used for to operate day to day business. If working capital is not managed properly, company can reach to crucial financial situation. So working capital should be managed in a systematic ratio with fixed assets, total assets and sales, so that income generation capacity can be increased

Objectives of the Study

The following are the main objectives of the study;

1. To explicate the concept and importance of working capital management in Paper Industry
2. To study the concept of ratios, utility of ratio analysis and compiling of ratios
3. To analyse the components of working capital in International Paper (APPM) Ltd (IPL).
4. To evaluate the financial performance through Ratio Analysis of International Paper APPM Ltd.,

Scope of the Study

The present study was mainly confined to International Paper APPM Ltd. International Paper APPM Ltd. (formerly known as The Andhra Pradesh Paper Mills Ltd.), is one of the largest integrated paper and pulp manufacturers in India. Established in 1964, the company produces writing, printing and copier papers for foreign and domestic markets. Our production facilities at Rajahmundry and Kadiyam (includes a recycle unit)

have a total production capacity of 240,000 TPA. The company employs around 2,500 employees and is headquartered in Hyderabad.

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.

II. SOURCES OF DATA AND METHODOLOGY

The primary data collected through discussions and the secondary data which is gathered from the Annual Reports of International Paper APPM Ltd, published materials in the form of books, articles from journals, websites and reports relevant to the study have been processed in tune with the objectives and relevant tables were prepared. The study of working capital management covers a period of ten years, commencing from 1st April 2003 to 31st March 2013. To analyse the financial progress and performance of paper mill used various ratios pertaining to working capital management are also applied for analyzing the data with a view to draw useful inferences.

Limitations of the Study

The ratios have been calculated, analyses and interpreted for the period under study i.e. from 1st April 2003 to 31st March 2013. 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.

III. COMPONENTS OF WORKING CAPITAL

The components of working capital are broadly current assets and current liabilities. They include cash and bank balances, account receivables, stock of raw materials, work in progress and finished goods, short term investments, prepaid expenses and income outstanding, account payables, short term loans taken, outstanding expenses and income received in advance. The goal of the working capital management is to manage the firms' current assets and current liabilities at a satisfactory level. To know the proportion of the component of working capital and the relevance of the components and its impact on profitability and liquidity of International Paper (APPM) Ltd (IPL) the analysis is made and details are presented in Table -01.

The data indicates that the component -wise analysis of working capital of IPL from 2003-04 to 2012-13. It is to be noted that inventories are the major contributors of the working capital of IPL. It was 8703.94 lakhs in the year 2003-04 and it has moved to the 14479.31 lakhs in the year 2012-13 and the average inventories was 11773.96 lakhs. The second major constituent of working capital of SPML was trade receivables which were 2491.08 lakhs in 2003-04 and it has moved to 4557.88 lakhs in the year 2012-13 and the average trade receivables 3841.93 lakhs. The next constituent is short-term loans and advances it was 2716.50 lakhs in the year 2003-04 and it has moved to 5338.67 lakhs in the year 2012-13 and it has average of 5190.08 lakhs. It indicates that the inventories are moving through the organisation rapidly. The trade payables was 7639.22 lakhs in the year 2003-04 and it has moved to 10705.81 lakhs in the year 2012-13 and average trade payables was 12092.14 lakhs. It indicates that the inventories are purchased on credit only.

Table1: Components of Working Capital of International Paper (APPM) Ltd (IPL)

Years	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Current Assets										
Inventories	8704	8624	8093	8946	10481	13525	11587	12107	21192	14479
Trade Receivables	2791	2688	2633	3490	4588	3875	4642	5629	3526	4558
Cash and Cash Equivalents	795	612	777	972	1330	807	1377	2068	2415	1656
Short-term loans and Advances	2717	3097	4046	4660	5531	5578	7229	9182	4524	5339

Other Current Assets	129	81	54	97	81	117			156	96
Gross Working Capital	15136	15102	15603	18165	22010	23901	24835	28986	31814	26129
Current Liabilities										
Trade Payables	7639	8390	13905	12262	12775	15470	13555	13993	12227	10706
Provisions	467	381	583	301	570	505	634	462	177	
Short-term borrowing									3280	5481
Other Current Liabilities									14365	14155
Current Liabilities	8106	8771	14487	12563	13345	15975	14188	14456	30049	30342
Net Working Capital	7029	6330	1116	5602	8666	7926	10647	14531	1765	-4213

Source: Annual Reports of International Paper (APPM) Ltd (IPL) 2003-2013.

Therefore, it is clear from the above analysis is that the company having the positive working capital i.e. current assets are greater than the current liabilities in the study period and only one years it has negative i.e. current assets are less than current liabilities.

Short Term Liquidity Position of International Paper (APPM) Ltd (IPL)

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.

$$\text{Current Ratio (WCR)} = \text{Current Assets} / \text{Current Liabilities}$$

The statistical data relating to calculation of current ratio was computed through the financial statements referred in their respective annual reports of International Paper (APPM) Ltd (IPL) for the study period from 2003-04 to 2012-13 are depicted in the below table-02.

Table2: Current Assets and Current Liabilities of International Paper (APPM) Ltd (IPL) (Rs. in Lakhs)

Year Ending 31 st March	Current Assets	Current Liabilities	Ratio
2003-04	15136	8106	1.9:1
2004-05	15102	8771	1.7:1
2005-06	15603	14487	1.1:1
2006-07	18165	12563	1.4:1
2007-08	22010	13345	1.6:1
2008-09	23901	15975	1.5:1
2009-10	24835	14188	1.8:1
2010-11	28986	14456	2.0:1
2011-12	31814	30049	1.1:1
2012-13	26129	30342	0.9:1

Source: Annual Reports of International Paper (APPM) Ltd (IPL) 2003-2013.

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 favourable 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 in International Paper (APPM) Ltd (IPL) in the entire study period, excepting 2010-11 in International Paper (APPM) Ltd (IPL). It clearly indicates, the normal general accepted solvency to meet their current obligations in time is not satisfactory during 2003-2009. 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. In 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 International Paper (APPM) Ltd (IPL) 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 mean current assets as reduced by inventory and prepaid expenses. A quick liability 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.

$$\text{Quick Ratio} = \text{Quick Assets} / \text{Current Liabilities}$$

The statistical data relating to calculation of quick ratio obtained through the financial statements referred in their respective annual reports of International Paper (APPM) Ltd (IPL) for the study period from 2003-04 to 2012-13 and are depicted in the table-03.

Table3: Quick Assets and Current Liabilities of International Paper (APPM) Ltd (IPL) (Rs. in Lakhs)

Year Ending 31 st March	Quick Assets	Current Liabilities	Ratio
2003-04	6432	8106	0.79:1
2004-05	6477	8771	0.74:1
2005-06	7510	14487	0.52:1
2006-07	9219	12563	0.73:1
2007-08	11529	13345	0.86:1
2008-09	10377	15975	0.65:1
2009-10	13248	14188	0.93:1
2010-11	16879	14456	1.17:1
2011-12	10622	30049	0.35:1
2012-13	11649	30342	0.38:1

Source: Annual Reports of International Paper (APPM) Ltd (IPL) 2003-2013.

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 cannot 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 firm in the study period, excepting 2010-11 the quick ratio is above the standard. It is noticed in the composition of current assets, the percentage of inventory in total assets is high in proportion in firm. The low quick ratio may also have liquidity position, if it has fast moving inventories. Therefore, quick ratio is more satisfactory in International Paper (APPM) Ltd (IPL) 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.

$$\text{Cash Ratio} = \text{Cash}^* + \text{Marketable Securities} / \text{Current Liabilities.}$$

*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 International Paper (APPM) Ltd (IPL) for the study period from 2003-04 to 2012-13 and are depicted in table 4.

Table4: Cash Ratio of International Paper (APPM) Ltd (IPL) (Rs. in Lakhs)

Year Ending 31 st March	Cash and Bank Balance	Current Liabilities	Ratio
2003-04	795	8106	0.10:1
2004-05	612	8771	0.07:1
2005-06	777	14487	0.05:1
2006-07	972	12563	0.08:1
2007-08	1330	13345	0.10:1
2008-09	807	15975	0.05:1
2009-10	1377	14188	0.10:1
2010-11	2068	14456	1.14:1
2011-12	2415	30049	0.08:1
2012-13	1656	30342	0.05:1

Source: Annual Reports of International Paper (APPM) Ltd (IPL) 2003-2013.

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. 2003-04 to 2012-13. The percentage of cash and bank balances in total assets in APPML was 1.30 in 2003-04, reduced to 0.90 percent in 2005-06 and thereafter with increasing trend reached to 1.71 percent in 2010-11. Hence, cash ratio is not satisfactory in International Paper (APPM) Ltd (IPL). 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 International Paper (APPM) Ltd (IPL) for the study period from 2003-04 to 2012-13 and are presented in the table.

Table5: Net Working Capital and Net Assets of International Paper (APPM) Ltd (IPL) (Rs. in Lakhs)

Year Ending 31 st March	Net Working Capital	Net Assets	Ratio
2003-04	7029	44236	0.16:1
2004-05	6330	48118	0.13:1
2005-06	1116	85748	0.01:1
2006-07	5602	103752	0.05:1
2007-08	8666	110065	0.08:1
2008-09	7926	115899	0.07:1
2009-10	10647	116895	0.09:1
2010-11	14531	120156	0.12:1
2011-12	1765	125731	0.01:1
2012-13	-4213	120756	-0.03:1

Source: Annual Reports of International Paper (APPM) Ltd (IPL) 2003-2013.

The net working capital ratio in International Paper (APPM) Ltd (IPL) was steady during 2005-06 to 2011-12. The net working capital ratio was 16% in 2003-04, 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. 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 up to 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. 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. In the year 2012-13 there is negative 3 percent net working capital ratio. 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.

IV. CONCLUSION

From the above study we can analyze that, the management of International Paper (APPM) Ltd (IPL) 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 firm. Cash ratio is not satisfactory in International Paper (APPM) Ltd (IPL) and it needs the attention of the management to induce effective utilization of cash and bank balances.

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