Working Capital Management Analysis - Study of Udaipur Cement Works Ltd

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Abstract

Working capital is regarded as the "lifeblood of business". Every business needs funds for two needs - long term funds which are required to create production facilities though purchase of fixed assets, like plant machinery, land, building etc. and short term funds for the purchase of raw materials, payment of wages and other day to day expense etc. These funds are also known as working capital or circulating capital or short-term capital. Working capital needs are generally financed through outside sources. The main objective of the study is to analyze the various components of working capital of the company and to assess the impact of working capital on profitability. The main objectives of the study are to analyze and evaluate the liquidity position of the company and to analyze the components of working capital of the company also to determine the impact of working capital on the profitability.

I. INTRODUCTION

Working capital management is concerned with the problems that arise in attempting to manage current assets and current liabilities. Finance is the lifeblood of organization and study of working capital is very important aspect to understand the firm's ability to repay its current liabilities and to conduct its day to day affairs of business in a smooth way. The study covers a detailed analysis of various components of working capital in Travancore Cements Limited, Kerala.

A. Objectives of the study

- To analyze and evaluate the liquidity and profitability position of the firm.
- To study the trend in current assets, current liabilities and sales.
- To analyze the working capital management of the company.
- To know the future need of working capital in the running organization.
- To analyze components of current asset in the company.

B. Tools and techniques used for data for data analysis

- Operating cycle analysis
- Schedule of changes in working capital
- Ratio analysis
- Trend analysis
- Correlation analysis

C. Assumptions of the Study

1. The study of working capital management helps to analyze the profitability and solvency position of the company.
2. The working capital analysis is useful for taking financial decision and for identifying the financial strength and weakness of the company.
3. The data collected from various secondary sources are true.
4. The data given by the company official are true and unbiased.

II. LITERATURE REVIEWS

Henry Onsare Okong stated Managing working capital of the business as that "It is necessary for any organization to runs its affairs successfully by providing adequate working capital. Advance technology needs improvement in the processing of raw materials, greater productivity and very fast production process, thus reducing investment in inventory and wages (5).

Dr. Raghunatha teddy & P. K Kameswari for their case study - Working Capital Management practices in Parma industry stated that "it is necessary for achieving both liquidity and profitability for the firm by an efficient working capital management. A poor and efficient management leading to tie up of funds reduces liquidity and profitability of the company. The different analytical tools, now a days, are employed to monitor, review and control working capital i.e. the length of operating cycle, working capital ratio and liquidity position . A reputed pharmaceutical company, Cipla Ltd. has been selected for a case study of working capital management. The quick ratio, the current ratio, working capital position and working capital turnover ratio of Cipla have been found to be within or a bit fluctuating around the Indian pharmaceutical industry standards, indicating an overall efficiency in the management of the company's working capital.

Dr. P.K. Singh for his Case study of Working Capital management in lubing laboratories

Ltd. stated that" The management should properly utilize debtors and also try to maintain the debtors as per their requirement; so liquidity will not be interrupted.

The research article highlighted mainly the concept of working capital, working capital policy, components of working capital and factors affecting working capital of lubing laboratories during last seven years and also identified which factors are mainly responsible for the improvement of working capital of the company.

III. BASIC CONCEPTS OF WORKING CAPITAL

A. *Management of Working Capital*

Management uses a combination of policies and techniques for the management of working capital. These require managing the current assets which can be broadly classified as -cash and cash equivalents; inventories and debtors. There are also lots of short terms financing options which are generally considered.

1) *Cash management-*

It indicates to the management criterion that identifies the cash balance which allows for the business to meet day to day expenses on the other hand reduces cash holding costs.

2) *Inventory Management-*

It indicates to the management criterion that identifies the level of inventory which allows for uninterrupted production but also responsible to reduces the investment in raw materials and hence increases cash flow.

3) *Debtor's Management*

It indicates to the management criterion that identifies the appropriate credit policy, i.e., credit terms which will attract customers, like any impact on cash flows and cash conversion cycle will be offset by increased revenue; and hence returns on capital.

4) *Short Term Financing*

Inventory: It is ideally financed by credit granted by the supplier, it also depends on the cash conversion cycle, it may be necessary to utilize a bank loan or to "convert debtors to cash" through "factoring"

B. *Classification of Working Capital*

1) *Gross Working Capital:*

Gross working capital refers to the sum of all current assets of the enterprise (i.e. total sum), employed in the business process.

2) *Net Working Capital:*

It highlights on the excess of current assets over current liabilities. It also implies that the portion of a firm's current assets which is financed by long term funds.

C. *Types of Working Capital*

1. Permanent working capital

It represents current assets required continuously over the entire year. A manufacturing enterprise has to carry minimum amount of inventories necessary to ensure continuous production and sales. Thus minimum amount of current assets which the firm holds for all time to come to carry an operation at any duration of time is referred as permanent or regular working capital. It has the following characteristics.

a. Time factor is the main basis of its classification.
b. It constantly changes from one asset to another and continuous to remain in the business process.
c. It is the size which increases with the growth of business operations.

2. Temporary or Variable Working Capital

It signifies the additional assets which are required at different times during the operating year like additional inventory, cash etc. The following characteristics are possessed under this:

a. It is not always gain fully employed, though it may change from one asset to another as permanent working capital does.
b. It is particularly suited to business of a seasonal or cyclical nature.

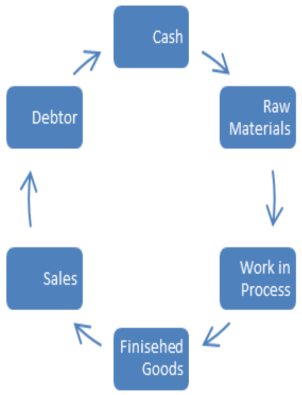
3. Need for Working Capital

There is always a time gap between the sale of goods and receipt of cash. Additional capital is required to have continuous business operations, the amount will be screwed up in the current assets like accounts receivable, stock etc. This is mainly due to the 'Cash Cycle or Operating Cycle'. By the time the cash is converted back to cash. The firm needs extra funds and hence the need for working capital. If this not provided, the business operations will be affected to a greater extent and hence this part of finance has to be managed well.

4. Working Capital Cycle

Working capital cycle refers to the length of time between firm's paying for materials which is entering into the stock and receiving the cash from sale of finished goods. The need for working capital is to run the day to day business activities which cannot be emphasized in an advanced manner. Earning a steady amount of profit requires successful sales activity. The firm has to invest sufficient funds in the current assets for generating sales. Current assets are needed because sales cannot convert it into cash instantaneously. There is always an operating cycle involved in the conversion of sales into cash.

Operating Cycle- It is the time duration required to convert sales activity; after the conversion of resources into inventories into cash. The operating cycle of a manufacturing company involves following phases.



The deduction of time required to complete the cycle of events in case of a manufacturing firm is called the Operating Cycle or working Capital Cycle.

Working capital cycle can be expressed as

O=R+W+F+D-C

Where

R=Raw material storage

W=work in progress holding period

F=Finished goods storage period

D=Debtors collection period

C=Credit period availed

5. Components of working capital

- **Cash- cash is the** most liquid and important component of working capital .Holding cash involves cash in the sense that the worth of cash in the present state held for a year is always less than the value of today's cash. During inflationary situation, the cost of holding includes the degradation in the value of cash.
- **Marketable securities-** Generally marketable securities provides lower yield that the firm's operation assets, thus, they serve two useful functions. Firstly, they act as a cash substitute, and secondly, can be used as a temporary investment. Marketable securities as temporary investment may be held for one of the following reasons:
  1. Seasonal or cyclical operations

2. To meet known financial requirements.

- **Account Receivable-** Accounts receivable is generally an important investment of any business organization, little analytical work needs to be implemented to determine credit policies. Account Receivable is a two- step account. Firstly, when the goods are shipped, inventories are reduced and accounts receivable is created; secondly, when the payment is made, the account is reduced and the cash level is increased. Thus, Accounts receivables are, characterized as a function of the volume of credit sales and the average length of time between collection and sales.
- **Inventory-** Management of inventories should be carried out in more efficient manner, so that this investment doesn't become too large, which would then result in blocked capital and which could be put to productive use elsewhere. On the other hand, having very small inventory, could result in loss of customer goodwill. Thus an optimum level of inventory should be maintained on a regular basis.

IV. METHODOLOGY

Research methods may be specified as those methods or techniques that can be used for research conduction.

Financial techniques commonly used for Working Capital Management

- Correlation Analysis
- Trend Analysis
- Ratio Analysis
- Working capital cycle

A. Correlation Analysis

It is defined as "the process by which two or more groups or set items may vary together directly or inversely".

Two variables are said to be correlated, if the change in one variable results in a corresponding change to the other variable. That is when two variables move together, they are said to be correlated.

- ***Co-efficient of Correlation***

It is an algebraic method of measuring correlation. This method of correlation is measured by finding a value known as the co-efficient of correlation using an appropriate formula.

$$R = \frac{N\Sigma XY - \Sigma X\Sigma Y}{\sqrt{N\Sigma X^2(\Sigma x)^2}\sqrt{N\Sigma y^2 - (\Sigma y)^2}}$$

B. Trend Analysis

Trend Analysis, also referred as Time series is the ratio which indicates the direction of change. This analysis is important in the applicability of the items in profit and loss accounts. For trend analysis the use of index numbers is generally adopted. The procedure which is adopted in this analysis is to assign the number 100 for items of the base year and to calculate percentage changes in each item of other years in relation to the base year. This procedure is called as the "trend-percentage method".

The trend analysis within the company's ratio itself is informative, but it is more informative when comparison is done with the company's ratio with that industry ratio. This comparison indicates how company has been operating well over time relative to its competitors and may also help to explain the trends in the company ratios.

C. Ratio Analysis

The ratio analysis is one of the most powerful tools of financial analysis. It is used as a device to analyze and interpret the financial of enterprise. The important factor used in Ratio Analysis is:

D. Current Ratio

Current Ratios signifies ratio of current assets to current liabilities. It is also called working capital ratio.

$$currentratio = \frac{currentAsset}{currentliability}$$

V. DATA ANALYSIS AND INTERPRETATION

A. Calculation of Working Capital

Net working capital reflects to the difference between current assets and current liabilities. It is a qualitative concept.

Net working capital = Current Assets - Current Liability

Table 1: Net Working Capital

Year	Current Assets	Current Liability	Net Working Capital
2006-2007	1125	1025	100
2007-2008	1240	995	245
2008-2009	1310	1240	70
2009 -2010	1440	1260	180
2011-2012	1449	1135	314

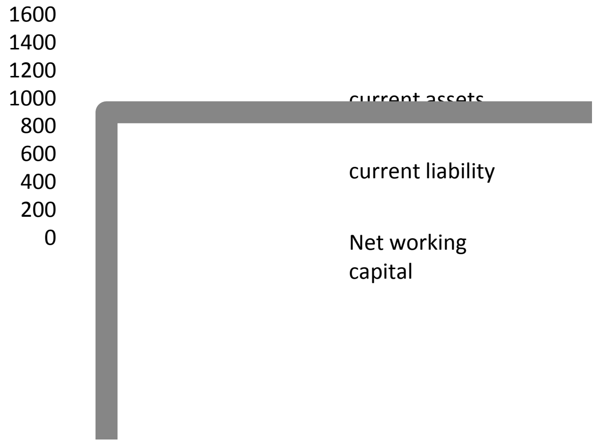


Figure 1: Net Working Capital

B. Interpretation

The net working capital of the company is showing a fluctuating trend for the year 2006-2007 to 2011-2012. In the year 2007-2008 company has the net working capital 245 lakhs shows increase due to increase in the component of current assets as inventory. In the year2008-2009 it shows a steadily decreasing trend due to increase in the sundry creditors. So firm was not in a satisfactory position in terms of working capital during this period. Again there is an increasing trend in working capital during the years 2009-2010 & 2011-2012.

C. Liquidity Ratios

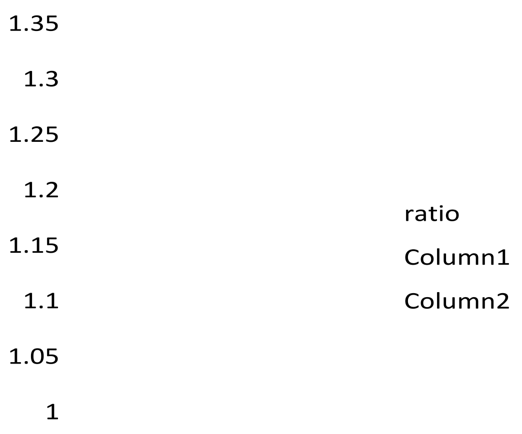
Liquidity ratio is the measure of firm's ability to meet its obligations. In fact analysis of liquidity approaches the preparations of cash and fund flow statements, cash budget, but liquidity ratios, by establishing a relationship between cash and other current assets to the current obligations provide a quick measure of liquidity.

D. Current Ratio or Working Capital

It represents the ratio of current assets to current liabilities. The current ratio is a measure of the firm's short term solvency. Current ratio of 1:1 means that the firm can meet its current liability. For a sound business, current ratio of 2:1 means that firm has safety margin to overcome its current liability.

$$\text{Current ratio} = \frac{\text{current asset}}{\text{Current liability}}$$

Table 2: Current Ratio



E. Interpretation

Year	Current Assets	Current Liability	Ratio
2006-2007	1125	1025	1.1
2007-2008	1240	995	1.2
2008-2009	1310	1240	1.1
2009 -2010	1440	1260	1.1
2011-2012	1449	1135	1.3

The above table deals with current ratio. The minimum standard for current ratio is 2:1. Though this company records a trend in its current ratio, as 1:1 near to the ideal level. The company has not achieved the standard ratio 2:1 in any of the years. The ratio is highest in the year 2011-2012.Current ratio of the company is not satisfactory hence short term solvency of the firm is not satisfactory.

VI. SUGGESTIONS AND CONCLUSIONS

A. Suggestions

1) The standard norm for the current ratio is 2:1. The study shows that the current ratio is not satisfying the standard norm and from the working capital ratio, we can determine that the company's working capital management is insufficient.
2) The study shows that the quick ratio of the company is fluctuating over the years. The company is not satisfying the standard norm.
3) Liquidity position of the company is not satisfactory.
4) Collection period of the company is at a very low rate.
5) The net profit of the company from 2006-2007 to 2011-2012 is negative. The return on investment ratio is also indicating a negative ratio

B. Conclusion

The study was conducted to analyze the working capital management in Udaipur Cement Works Ltd. in the state of Rajasthan. The financial position of the company was analysed and interpreted. The analysis and interpretation of data relating to working capital management of Udaipur Cement Works Ltd. have concluded that working capital management is not up to the mark and company requires a safe current ratio. Since the working capital amount shows a decreasing trend, reveals that the company is not in a position to meet its day to day obligations. So the company must take necessary steps to improve the net working capital to meet its requirement in time and also reduce current liabilities so as to make the current ratio at the standard.

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