Working capital management: A case study on ABJA investment CO. PTE. LTD. (Subsidiary of Tata Steel)

Amit Kr. Gupta
Department of Management, Delhi University, Delhi, India

Abstract
Purpose of this case study is to understand the concept of working capital management and actual working capital position of a subsidiary of Tata Steel. Identifying the major components of the working capital with the help of studying and analyzing the balance sheet of the company. Identifying the factors which lead to increase or decrease in ABJA Investment Company. I have explained the concept of working capital management. The major decision management takes using working capital ratios. How ratios are calculated and how their impact on companies operations and management decision?
ABJA Investment Company issues guaranteed notes listed on the Open Market of the Frankfurter Wertpapierbourse, Frankfurt Stock Exchange and the Official List of the Singapore Exchange Securities Trading Limited. The company is based in Singapore. I have analyzed its financial data in last 3 years and calculated its ratios and provided by suggestion based on my analysis.
Working capital management is to utilize the two components of working capital, current assets and current liabilities, to ensure the most financially efficient operation of the company. Working capital management is to make sure the company always maintains sufficient cash flow to meet its short-term operating costs and short-term debt obligations.
The working capital cycle 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. Therefore, companies strive to reduce their working capital cycle by collecting receivables quicker or sometimes stretching accounts payable.

Keywords: Working capital management, balance sheet, ratios, cash position, working capital position

Introduction
Working capital management refers to a company's managerial accounting strategy designed to monitor and utilize the two components of working capital, current assets and current liabilities, to ensure the most financially efficient operation of the company. The primary purpose of working capital management is to make sure the company always maintains sufficient cash flow to meet its short-term operating costs and short-term debt obligations.
The working capital cycle 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. Therefore, companies strive to reduce their working capital cycle by collecting receivables quicker or sometimes stretching accounts payable.
Effective working capital management helps company's smooth financial operation, and helps to improve the company's earnings and profitability. Management of working capital includes inventory management, management of accounts receivables, cash management, accounts payables, derivatives and tax liabilities.
Management uses a combination of policies and techniques for the management of working capital. The policies aim at managing:
1. **Debtor's management**: It identifies the appropriate credit policy, i.e. credit terms which will attract customers, such that any impact on cash flows and the cash conversion cycle will be offset by increased revenue. Ratio calculated for this is Working capital ratio.
2. **Cash management**: It identifies the cash balance which allows for the business to meet day to day expenses, but reduces cash holding costs. Ratio calculated for this is Acid Test Ratio and Cash Ratio.
3. **Inventory management**: It identifies the level of inventory which allows for uninterrupted production but reduces the investment in raw materials, minimizes reordering costs and hence increases cash flow. It leads times in production should be lowered to reduce Work in Process and similarly the Finished Goods should be kept on as low level as possible to avoid overproduction. Ratio calculated for this is Inventory turnover ratio.

4. **Short-term financing**: It identifies the appropriate source of financing, given the cash conversion cycle: the inventory is ideally financed by credit granted by the supplier; however, it may be necessary to utilize a bank loan (or overdraft), or to "convert debtors to cash" through "factoring". It’s an overall assessment from all the working capital management ratios.

Working capital management majorly involves maintain and monitoring cash flow, current assets and current liabilities through ratio analysis. Ratio analysis includes the working capital ratio, collection ratio and the inventory turnover ratio.

**Ratios of Working Capital Management**

1. **The working capital ratio**: It is calculated as current assets divided by current liabilities, is considered a key indicator of a company's fundamental financial health since it indicates the company's ability to successfully meet all of its short-term financial obligations. A working capital ratio below 1.0 is indication of a company having trouble meeting short-term obligations, usually due to insufficient cash flow. Working capital ratio between 1.2 to 2.0 is considered desirable and a ratio higher than 2.0 may indicate a company is not making the effective use of its current assets.

   Working Capital Ratio = Current Assets / Current Liabilities

2. **Acid Test Ratio**: It is calculated as quick assets divided by current liabilities. It often gives choices about the liquidity of working capital is the acid test ratio or quick ratio. Quick assets are defined as current assets minus inventory. Among the various element of working capital, inventory is relatively less liquid and hence deducted from total current assets to give the value of quick assets in the firm. The ratio is often used to supplement the information furnished by a current ratio. An acid test ratio of 1:1 is considered satisfactory.

   Acid test ratio = (Current assets – inventory) / Current liabilities.

3. **Cash Ratio**: It is calculated as cash elements divided by current liabilities. Only cash and marketable securities have been used in the numerator as they are highly liquid. Thus, each ratio measures absolute liquidity of the business. It can give significant insight into the liquidity position if used in conjunction with current and acid test ratios.

   Cash ratio = cash and marketable securities / Current Liabilities

4. **Inventory Turnover Ratio**: It is calculated as revenues divided by inventory cost, reveals how rapidly a company's inventory is being sold and replenished. A relatively low ratio compared to industry peers indicates inventory levels are excessively high, while a relatively high ratio indicates the efficiency of inventory ordering can be improved. To operate with maximum efficiency and maintaining an effective working capital. A company has to maintain its working capital to meet customer need instead of unnecessary ties up of working capital for a long period of time before it is converted into cash. Companies typically measure how efficiently that balance is maintained by monitoring the inventory turnover ratio.

   Inventory Turnover Ratio = Revenue / Inventory Cost

**Study on Abja Investment Co. Pte. Ltd. Financials**


**Study on its Working Capital.**

I have extracted the financial statement of last three financial years to analysis working capital position of the company.

<table>
<thead>
<tr>
<th>USDk</th>
<th>FY 1617</th>
<th>FY 1516</th>
<th>FY 1415</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest income</td>
<td>112,398</td>
<td>114,957</td>
<td>32,875</td>
</tr>
<tr>
<td>Finance costs</td>
<td>- 97,723</td>
<td>- 97,508</td>
<td>- 69,027</td>
</tr>
<tr>
<td>Cash and Cash equivalent</td>
<td>16,233</td>
<td>11,770</td>
<td>7,360</td>
</tr>
<tr>
<td>Other Receivables</td>
<td>23,001</td>
<td>21,699</td>
<td>17,235</td>
</tr>
<tr>
<td>Drivatives Financial Instruments</td>
<td>309</td>
<td>150</td>
<td>265</td>
</tr>
<tr>
<td>Current Assets Total</td>
<td>39,543</td>
<td>33,619</td>
<td>24,860</td>
</tr>
<tr>
<td>Loan Receivables</td>
<td>1,679,085</td>
<td>1,690,932</td>
<td>1,670,502</td>
</tr>
<tr>
<td>Derivatives</td>
<td>12,808</td>
<td>4,793</td>
<td>7,563</td>
</tr>
<tr>
<td>Non Current Assets Total</td>
<td>1,691,893</td>
<td>1,695,725</td>
<td>1,678,065</td>
</tr>
<tr>
<td>Total Assets</td>
<td>1,731,436</td>
<td>1,729,344</td>
<td>1,702,925</td>
</tr>
</tbody>
</table>
Using financial values mentioned in above table, I have calculated three ratios

<table>
<thead>
<tr>
<th>Ratios</th>
<th>FY 1617</th>
<th>FY 1516</th>
<th>FY 1415</th>
<th>Method Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Capital Ratio</td>
<td>1.3940</td>
<td>0.4768</td>
<td>0.3967</td>
<td>Current Assets / Current Liabilities</td>
</tr>
<tr>
<td>Cash Ratio</td>
<td>0.5476</td>
<td>0.1669</td>
<td>0.1174</td>
<td>Cash &amp; Cash Equivalent / Current Liabilities</td>
</tr>
<tr>
<td>Financing / Inventory Turnover Ratio</td>
<td>1.1502</td>
<td>1.1789</td>
<td>0.4763</td>
<td>Interest Income / Finance Cost</td>
</tr>
</tbody>
</table>

**Working Capital Ratio**

In last three years companies has improved in this ratio. Currently it is in bracket of 1.2 to 2 ratios. Company has shown improvement on current asset which is increased from USD 24 million to USD 39 million and company is able to reduce its current liabilities by repaying its short term loan of USD 37 million which is effect of increase in cash position. So in last three years company has really worked on its working capital position, which is very well reflected by increase in working capital ratio.

**Cash Ratio**

Cash ratio has also improved in the similar trend in which working capital ratio has improved for the company. Major reason for increase in cash ratio is increase in its operation income, which lead to increase in cash position as debtors didn’t increased in the same % of increase in cash. It means company has really improved on its payment terms. Again it’s a positive sign for the company and with increase in cash in business means they can invest in expansion of their business.
Inventory Turnover Ratio
Major business of the company is to generate revenue from financing activities. So we have calculated its financing turnover ratio which is kind of inventory for this company. As per my analysis there is an increase in this ratio in last 3 years is due to increase in its revenue / sales which lead to higher investment in its inventory. It is a good sign as company has improved on its working capital cycle and cash position. Although increase in this ratio is not considered a good sign reason is company has stuck up its capital in inventory which is not paying off accordingly. But in this scenario due to increase in its sales lead to an increase in this ratio. So company is doing good.

Suggestions
Company is doing great in terms of its working capital management area. Major reasons are:
1. It has improved its cash from USD 7 million to USD 16 million in last three years.
2. Other receivables increased from USD 17 million to USD 23 million in last three years.
3. Other payable reduced significantly.
4. Interest income increased from 32 million to 112 million.

It means company has improved on its cash position and on its working capital cycle. So the management and company should work on the same parameters in coming years as well, which lead to increase in working capital position.

References
28. Cote JM, Latham CK. The Merchandising Ratio: A Comprehensive Measure of Current assets Strategy,