A STUDY ON THE ROLE OF WORKING CAPITAL MANAGEMENT IN SELECTED STEEL COMPANIES

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ABSTRACT: The steel sector is utmost important and crucial sectors and it plays vital role in the development of the nation. The level of per capita consumption of steel significantly determines the socio-economic growth of a nation. Working capital also plays vital role in any business firm. So, this study tries to examine the performance of working capital management in steel sector. Therefore, the researcher has selected five steel companies from toppers and covered the period from 2012-13 to 2016-17 and to analyze selected data ratio analysis method was used as tools. The final conclusion of this study is no one is best in every function, some are good at one thing and some at other.

KEYWORDS: Steel Sector, working capital management.

Recently, the Indian steel industry became one of the main suppliers in India’s output manufacturing. In the case of both developing and developed countries there has been a greater role played by the iron and steel industry in the economic growth. It is one of the crucial industries. Steel industry is also base industry in engineering, machine tools, ship buildings, railways, transport, equipments, electrical and many others. All of these industries raised the consumption of iron and steel.

Logically, it can be said that the iron and steel industry is the leading industry. It is proved that of a country’s economic growth level of GDP and quantum of steel consumption has a related correlation between them. It clearly shows that there is a straight relation connecting the investments of the economy and the growth of steel industry. Due to large level on the development of iron and steel industry there may be quick industrialization and economic growth of a country.

In the modern economy steel industry plays an essential role in the country’s development. In fact socio economic growth and living standard of the people is also measured by per capita consumption of steel. Its contribution in Indian GDP is also remarkable. In the countries infrastructural growth Iron and steel are said to be the key components.

As the Indian Iron and Steel Industry is a top growing sectors and automobiles industry, real estate’s industry, transportation system, aircraft industry, ship building industry are main demand drivers for the Indian Iron and Steel industry. Recently, India secures 5th rank in the production of steel globally. It is estimated that India will go beyond Japan and will achieve the position of second largest in steel production in near future, and also intends to reach 300 million tones of yearly steel production by 2025-30.

Working capital is the backbone of every business firm. To fulfill the short –term financial necessities of a business enterprise working capital plays a vital role.
Working capital management is significant part of corporate financial management. With the help of working capital management the profitability of firm can also be recognized. Generally, working capital management includes the management of company’s current assets and current liabilities in order to maintain a finest level of working capital. It is necessary that there should be higher level of working capital as it leads to underutilization of resources whereas, lower level may generate problems in running the production processes, consequently, this level is required to be most encouraging.

Working capital management becomes more essential at the time of retaining profitability, liquidity and solvency of firm. The management of working capital plays a crucial role in the success of any business firm. The difference between the survival and bankruptcy of the firm can be seen with the presence of efficient working capital management.

In order to run viably and productively the capacity working capital management is the present resources and current liabilities in such a manner that provides the firm maximum profit for its benefits and minimizes the payments for its obligations. Therefore, the main intend of working capital management is to retain balance between liquidity and profitability at the same time as performing the routine functions of business concern.

**Review of literature**

- **S. Pramila & K. Kumar (2016)**, tried to examine the working capital management in Tata steel limited. This study covered the period from 2010-11 to 2014 -15. The researcher selected Tata steel as sample for this study. Ratio analysis was used as tool for analysis. The final conclusion of this study was that working capital turnover ratio of selected company was not acceptable.

- **R. Sivaranjani, Mrs. B. Kishori (2016)**, made their study on Comparative Analysis of Working Capital Management Among Top 5 NSE Listed Indian Steel Companies. It covered the period from 2010-11 to 2014-15. The researcher selected 5 steel companies as sample for the study. There were many tools used in this study such as Correlation, regression ANOVA, Chi-square analysis. The study revealed that there was a significant positive relationship between two variables. This study was also helpful to financial manager for managing firm’s working capital in proper way.

- **Kulkanya Napompech (2012)**, observed the effects of working Capital Management on the Profitability of Thai Listed Firms. The study covered the period from 2007 to 2009. The researcher selected 255 companies as sample listed on the Stock Exchange of Thailand. The tools used were Descriptive Statistics, Correlation Analysis & Regression Analysis. The final results of this study showed a significant negative relationship between firm’s profitability and the inventory conversion period and receivables collection period. This study also found an inverse relationship between the payables deferral period and profitability.

- **K. Madhavi (2014)** investigated the working Capital Management of Paper Mills. It covered the period from 2002 to 2011. Two paper companies were selected as sample for the study. The researcher used Ratio analysis as a tool for the analysis.
The study concluded that the performance of SSPBL was more satisfactory as compared to APPML.

- **Ayub Ahamed K S (2017)**, made a comparative study on working capital management of selected pharmaceutical companies of India. The study covered the period from 2012 to 2016. The researcher selected 5 pharmaceuticals as sample for the study. Ratio analysis was used as tool for the analysis. The final outcome of this study revealed that the management of working capital was really appreciable.

- **Hiral Desai, Dr. Vigna Oza (2015)**, worked on a Comparative Study of Working Capital Management of Dabur India and Marico. It covered the period from 2004-05 to 2013-14. The researcher selected two FMCG companies as sample for the study. The tools like Ratio analysis, Spearman Rank Correlation (r) were used in this study. The study concluded that the Profitability position of Dabur India was much better than Marico. The study also showed that there was a negative relationship between liquidity and profitability of Dabur India and Marico but positive relationship between profitability and risk of Dabur India and Marico.

### Objectives of the study

The specific objectives of the study are:

- To study the concept and importance of working capital and it also includes the concept of ratio, utility of ratio analysis.
- To measured the financial performance throughout Ratio Analysis of selected steel companies on comparative source in conditions of short period.

### Research methodology

#### Sources of Data

For this research study Secondary sources of data is consumed. Secondary data have been acquired from the annual reports of steel companies, companies’ websites and so on.

#### Universe

The researcher has selected five steel companies for this research study.

- Visa steel
- Tata steel
- Steel authority of India (Sail )
- JSW steel
- Bhusan steel ltd

#### Period of data coverage

This study covered the period of Five years from 2012-13 to 2016-17 to analyze the working capital management of selected steel companies.

#### Analysis of data

With the help of statistical calculations, Microsoft excels tools the resulting of tables, diagrams and statistical results can be achieved. All the data collected is to be analyzed under working capital ratios of selected steel companies

### LIMITATION OF STUDY

1. Five steel companies are selected for this study that is working in India.
2. For the statistical analysis of selected data only one technique is used namely ratio analysis and other tools are not used.
3. The present study is totally based on secondary data so it cannot be blindly trusted.
4. As there are many wide concepts of working capital management and bringing them all together is not a Childs play. Therefore, some concepts may not be covered in the study.

Data analysis and interpretation

Current ratio
The current ratio is a liquidity ratio, which deals the ability of a company to pay its short-term and long-term liabilities. This ratio includes every current total assets of a firm liquid and illiquid also. Significant value of this ratio is 2:1. It is measured as satisfactory level for a firm. It proves fine short-term solvency of business concern.

<table>
<thead>
<tr>
<th>Year</th>
<th>Visa</th>
<th>Tata</th>
<th>Sail</th>
<th>JSW</th>
<th>Bhusan</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.46</td>
<td>0.86</td>
<td>1.01</td>
<td>0.88</td>
<td>0.71</td>
</tr>
<tr>
<td>2014</td>
<td>0.33</td>
<td>0.57</td>
<td>0.79</td>
<td>0.82</td>
<td>0.54</td>
</tr>
<tr>
<td>2015</td>
<td>0.2</td>
<td>0.62</td>
<td>0.68</td>
<td>1.02</td>
<td>0.63</td>
</tr>
<tr>
<td>2016</td>
<td>0.15</td>
<td>0.52</td>
<td>0.61</td>
<td>0.67</td>
<td>0.16</td>
</tr>
<tr>
<td>2017</td>
<td>0.16</td>
<td>0.55</td>
<td>0.6</td>
<td>0.79</td>
<td>0.17</td>
</tr>
</tbody>
</table>

Sources: Money control

Chart no: 1.1
The above table no. 1.1 represents that the current ratio of Visa Steel Ltd in the year 2013 was 0.46. Thereafter, it was decreased constant three years and in the financial year 2017 it was reached 0.16.

The current ratio of Tata steel Ltd was 0.86 in the financial year of 2013. Later on, it decreased with 0.57 in 2014. Subsequently, it was increased in 2015 with 0.62. Thereafter, it was raised constant two years and reached 0.55 in the financial year 2017. In this way during the whole research period there were many ups and downs showed.
The current ratio of Sail steel ltd was 1.01 in the financial year of 2013. Later on, it decreased constant four years and reached 0.60 in the financial year 2017. In this way during the whole research period downward trend were showed.

The current ratio of JSW steel ltd was 0.88 in the financial year of 2013. Later on, it decreased with 0.82 in 2014. Subsequently, it was increased in 2015 with 1.02. Thereafter, it was decreased in 2016 with 0.67. Lastly, it reached 0.79 in the financial year 2017. In this way during the whole research period there were many up and downs showed.

The current ratio of Bhusan steel ltd was 0.71 in the financial year of 2013. Later on, it decreased with 0.54 in 2014. Subsequently, it was increased in 2015 with 0.63. Thereafter, it was decreased constant two years and reached 0.17 in the financial year 2017. In this way during the whole research period there were many up and downs showed.

**Quick ratio**

The quick ratio is recognized as the acid-test ratio, this ratio calculates the liquidity extra truthfully than current ratio. The noteworthy value of this ratio is 1:1. It concludes the ways of a firm meeting its short-term financial obligations.

<table>
<thead>
<tr>
<th>Year</th>
<th>Visa</th>
<th>Tata</th>
<th>Sail</th>
<th>JSW</th>
<th>Bhusan</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.4</td>
<td>0.61</td>
<td>0.68</td>
<td>0.69</td>
<td>0.89</td>
</tr>
<tr>
<td>2014</td>
<td>0.27</td>
<td>0.32</td>
<td>0.62</td>
<td>0.71</td>
<td>0.57</td>
</tr>
<tr>
<td>2015</td>
<td>0.26</td>
<td>0.27</td>
<td>0.55</td>
<td>0.67</td>
<td>0.91</td>
</tr>
<tr>
<td>2016</td>
<td>0.24</td>
<td>0.32</td>
<td>0.42</td>
<td>0.41</td>
<td>0.32</td>
</tr>
<tr>
<td>2017</td>
<td>0.19</td>
<td>0.28</td>
<td>0.38</td>
<td>0.56</td>
<td>0.26</td>
</tr>
</tbody>
</table>

*Sources: Money control*

**Chart no: 1.2**

The above table no 1.2 represents that the quick ratio of Visa Steel ltd in the year 2013 was 0.40. Thereafter, it was decreased constant four years and in the financial year 2017 it was reached 0.19.
The quick ratio of Tata steel Ltd was 0.61 in the financial year of 2013. Later on, it decreased with 0.32 in 2014. Subsequently, it was declined in 2015 with 0.27. Thereafter, it was raised with 0.32 again it was decreased and reached 0.28 in the financial year 2017. In this way during the whole research period there were many up and downs showed.

The quick ratio of sail steel Ltd was 0.68 in the financial year of 2013. Later on, it declined constant four years and reached 0.38 in the financial year 2017. In this way during the whole research period downward trend were showed.

The quick ratio of JSW steel Ltd was 0.69 in the financial year of 2013. Later on, it increased with 0.71 in 2014. Subsequently, it was declined in 2015 with 0.67. Thereafter, it was decreased again in 2016 with 0.41. Lastly, it reached 0.56 in the financial year 2017. In this way during the whole research period there were many up and downs showed.

The quick ratio of Bhusan steel Ltd was 0.89 in the financial year of 2013. Later on, it decreased with 0.57 in 2014. Subsequently, it was increased in 2015 with 0.91. Thereafter, it was decreased constant two years and reached 0.26 in the financial year 2017. In this way during the whole research period there was performance showed.

**Inventory turnover ratio**

The inventory turnover ratio is a competence ratio which confirms how resourcefully the inventory is managing its average inventory for a specified time period by comparing cost of goods sold.

**Table no: 1.3**

<table>
<thead>
<tr>
<th>Year</th>
<th>Visa</th>
<th>Tata</th>
<th>Sail</th>
<th>JSW</th>
<th>Bhusan</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>3.83</td>
<td>8.05</td>
<td>2.79</td>
<td>8.1</td>
<td>2.12</td>
</tr>
<tr>
<td>2014</td>
<td>7.17</td>
<td>7.71</td>
<td>3.45</td>
<td>7.96</td>
<td>1.64</td>
</tr>
<tr>
<td>2015</td>
<td>8.75</td>
<td>5.79</td>
<td>2.88</td>
<td>5.87</td>
<td>1.6</td>
</tr>
<tr>
<td>2016</td>
<td>4.35</td>
<td>6.03</td>
<td>2.99</td>
<td>6.06</td>
<td>6.25</td>
</tr>
<tr>
<td>2017</td>
<td>8.04</td>
<td>5.2</td>
<td>3.17</td>
<td>6.14</td>
<td>4.77</td>
</tr>
</tbody>
</table>

Sources: Money control

**Chart no: 1.3**

[Chart showing inventory turnover ratio for Tata, Sail, JSW, and Bhusan over years 2013 to 2017]
The above table no 1.3 represents that the inventory turnover ratio of Visa Steel ltd in the year 2013 was 3.83. Thereafter, it was boost up constant two years reached 8.75 in 2015. Subsequently, it was declined with 4.35 in 2016. Nextly, in the financial year 2017 it was again raised and reached 8.04.

The inventory turnover ratio of Tata steel ltd was 8.05 in the financial year of 2013. Later on, it reduced with 7.71 in 2014. Subsequently, it was again declined in 2015 with 5.79. Thereafter, it was raised in 2016 with 6.03. Nextly, in the financial year 2017 it was declined with 5.2. In this way during the whole research period there was moderate performance showed.

The inventory turnover ratio of sail steel ltd was 2.29 in the financial year of 2013. Later on, it increased in 2013 with 3.45. Thereafter, it reduced constant two years and reached 3.17 in the financial year 2017. In this way during the whole research period average performance was showed.

The inventory turnover ratio of JSW steel ltd was 8.1 in the financial year of 2013. Later on, it decreased with 7.96 in 2014. Subsequently, it was decreased in 2015 with 5.87. Thereafter, it was raised constant two years and reached 6.14 in the financial year 2017. In this way during the whole research period there were many up and downs showed.

The inventory turnover ratio of Bhusan steel ltd was 2.12 in the financial year of 2013. Later on, it decreased constant two years with 1.64 and 1.60% in financial years 2014 and 2015 respectively. Subsequently, it was boost up in 2016 with 6.25. Thereafter, it was again declined and reached 4.77 in the financial year 2017. In this way during the whole research period there were many up and downs showed.

### Debtor's turnover ratio

The debtor’s turnover ratio is a motion ratio. This ratio spotlights the policies of collection and credit applied by a firm. This ratio explains the promptness of the debtors converted into cash.

<table>
<thead>
<tr>
<th>Year</th>
<th>Visa</th>
<th>Tata</th>
<th>Sail</th>
<th>JSW</th>
<th>Bhusan</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>9.23</td>
<td>44.91</td>
<td>9.71</td>
<td>22.02</td>
<td>6.03</td>
</tr>
<tr>
<td>2014</td>
<td>20.41</td>
<td>53.21</td>
<td>9.43</td>
<td>22.2</td>
<td>4.03</td>
</tr>
<tr>
<td>2015</td>
<td>19.02</td>
<td>66.21</td>
<td>10.54</td>
<td>21.71</td>
<td>4.38</td>
</tr>
<tr>
<td>2016</td>
<td>4.94</td>
<td>67.97</td>
<td>12.33</td>
<td>16.18</td>
<td>6.59</td>
</tr>
</tbody>
</table>
Sources: Money control

Chart no: 1.4

The above table no.1.4 represents that the debtors’ turnover ratio of VISA Steel ltd in the year 2013 was 9.23. Thereafter, it was boosted in 2014 with 20.41. Nextly, it was little declined in 2015 with 19.02. Subsequently, it was reduced constant two years and in the financial year 2017 it was reached 9.65.

The Debtors turnover ratio of Tata steel ltd was 44.91 in the financial year of 2013. Later on, it rose constant three years and reached 67.97 in 2016. Subsequently, it was declined with 36.37 in the financial year 2017. In this way during the whole research period mix trend was showed.

The Debtors turnover ratio of sail steel ltd was 9.71 in the financial year of 2013. Later on, it was decreased with 9.43 in 2014. Nextly, it boosts up constant three years and reached 14.66 in the financial year 2017. In this way during the whole research period downward trend were showed.

The Debtors turnover ratio of JSW steel ltd was 22.02 in the financial year of 2013. Later on, it increased with 22.20 in 2014. Subsequently, it was decreased constant three years and reached 16.19 in the financial year 2017. In this way during the whole research period thare were many up and down showed.

The Debtors turnover ratio of Bhusan steel ltd was 6.03 in the financial year of 2013. Later on, it decreased with 4.03 in 2014. Subsequently, it was boosted for constant three years and reached 10.12 in the financial year 2017. In this way during the whole research period there were mix trend showed.

Cash turnover ratio

This ratio points to the number of times the cash quantity is twisted over during the book keeping period. It calculates the effectiveness of cash management.
The above table no.1.5 represents that the cash turnover ratio of VISA Steel ltd in the year 2013 was 22.82. Thereafter, it boost up with 76.23 in 2014. Nextly, it rises with 182.25 in 2015. Lastly, it declined constant two years and in the financial year 2017 it was reached 99.44.

The cash turnover ratio of Tata steel ltd was 17.22 in the financial year of 2013. Later on, it boosted for constant two years with 43.40 and 87.31 in 2014 to 2015 respectively. Subsequently, it was declined constant two years and reached 49.46 in the financial year 2017. In this way during the whole research period there were many up and down showed.

The cash turnover ratio of sail steel ltd was 11.58 in the financial year of 2013. Later on, it increased constant two years and reached 19.82 in the financial year 2015. Thereafter, it boost up for constant two years and reached 153.76 in 2017. In this way during the whole research period upward trend were showed.

The cash turnover ratio of JSW steel ltd was 25.31 in the financial year of 2013. Later on, it increased with 97.26 in 2014. Subsequently, it was sharp decline in 2015 with 25.67. Thereafter, it was again raised in 2016 with 61.33. Lastly, it reduced with 50.91 in the financial year 2017. In this way during the whole research period there were many up and down showed.

<table>
<thead>
<tr>
<th>Year</th>
<th>Visa</th>
<th>Tata</th>
<th>Sail</th>
<th>JSW</th>
<th>Bhusan</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>22.82</td>
<td>17.22</td>
<td>11.58</td>
<td>25.32</td>
<td>69.94</td>
</tr>
<tr>
<td>2014</td>
<td>76.24</td>
<td>43.40</td>
<td>16.35</td>
<td>97.26</td>
<td>116.63</td>
</tr>
<tr>
<td>2015</td>
<td>182.25</td>
<td>87.31</td>
<td>19.83</td>
<td>25.67</td>
<td>122.59</td>
</tr>
<tr>
<td>2016</td>
<td>98.30</td>
<td>37.66</td>
<td>131.06</td>
<td>61.33</td>
<td>72.26</td>
</tr>
<tr>
<td>2017</td>
<td>99.44</td>
<td>49.46</td>
<td>153.77</td>
<td>50.91</td>
<td>88.58</td>
</tr>
</tbody>
</table>

Sources: money control

Research Guru: Online Journal of Multidisciplinary Subjects (Peer Reviewed)
The cash turnover ratio of Bhusan steel ltd was 69.93 in the financial year of 2013. Later on, it boosts up constant two years with 116.63 and 122.59 in 2014 to 2015 respectively. Subsequently, it was decreased in 2016 with 72.26. Thereafter, it raised and reached 88.58 in the financial year 2017. In this way during the whole research period there were many up and down showed.

Findings

- The current ratios of all the selected companies are less than its standard value i.e. 2:1. Therefore, all the companies need to work hard and pay appropriate attention in order to improve current situation. Though the performance of sail and JSW are still better among all.

- The quick ratio of all the selected companies is less than its standard value i.e. 1:1. The performance of Bhusan is remarkable with 0.91 as it is very near to its standard value and the rest company should concentrate on their managerial system.

- The inventory turnover ratio of Visa, Tata, and JSW are really noticeable compared to other selected companies. The rest companies should take necessary actions in order to maintain a better inventory turnover.

- The debtors’ turnover ratio of Visa, Tata and JSW were disappointed as their debt collecting policy is poor and the performance of sail and Bhusan are better.

- The cash turnover ratio of Visa, Sail and Bhusan shows a remarkable progress in their performance which means they are efficiently going through its cash cycle and rest companies should concentrate and try to improve on their cash cycles.

Conclusion

This study concludes that in the management of current assets and liabilities the performance of Sail, JSW and Tata are best among others. On the other, hand if we take a look at the inventory side the performance of Visa, Tata, and JSW are superior to others. This reveals that no one is best in every function some are good at one thing and some at other. Therefore, all the selected companies should pay proper attention on the management of the companies in order to enhance their performance and improve their management skills.

Reference


**Websites**

https://www.ibef.org › Industry
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