A Comparative Study of the Liquidity Performance of Selected Indian Pharmaceutical Companies

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Abstract

The objective of this paper is to measure the liquidity performance of ten selected Indian pharmaceutical companies. The main object of this paper is to find the answer of question that different liquidity indicators of different selected pharmaceutical companies are significantly different or not? Liquidity ratios, performance ratios and efficiency ratios are used to measure the liquidity position of the selected Indian pharmaceutical companies. Researcher applied Kruskal-Wallis Test. This study is based on secondary data, which collected from Ace Knowledge, for the period of 2008 to 2017 of selected Indian pharmaceutical companies. The result of this study shows that different liquidity indicators such as Current ratio, Quick ratio, Inventory turnover ratio etc. of different selected pharmaceutical companies are significantly different.

KEY WORDS: Liquidity, Profitability, Kruskal Wallis Test, Pharmaceutical companies.

INTRODUCTION

An essential component of liquidity is the time an asset takes to be converted into cash or the time is takes to pay a current liability. So time stated as the ability of the firm to pay its liabilities on time. Liquidity may also be viewed as the ability of the firm to argument its future cash flows to cover any unforeseen needs or to take advantage of any unforeseen opportunities. This concept of liquidity has been referred to as financial flexibility. This viewpoint is much broader and would consider such things as the firm's stability of earnings, its relative debt/equity position and the availability of credit lines. The liquidity focuses on short-term assets which generate low profit and contain low risk. Every firm tries to maximize its profitability by maintaining liquidity. However, increasing profit at the cost of liquidity may cause of firm financial insolvency and goodwill.

REVIEW OF LITERATURE

(Yahaya, 2016) Researcher selected six pharmaceutical companies in Nigeria, for the period of 2006 to 2013. The aim of this study was to analyzed the impact of working capital management on the financial performance of Nigerian pharmaceutical firms. Researcher used account receivables ratio, account payable ratio, cash and inventory conversion ratio as accounting ratios and regression analysis as a statistical technique to measure the efficiency of working capital management of selected companies. The study investigated that inventory and account receivables were positively related with financial performance but account payable was negatively related with financial performance. Cash conversion cycle were statistically insignificant with financial performance. The study suggested that to decrease the cash conversion cycle, companies should increase their receivables collection period, invest more in inventory and reduce account period.
The objective of this study was to examine the impact of level of liquidity and working capital on the profitability of selected companies. Researcher selected 84 companies in 7 different industries such as Chemical, Pharmaceutical, Automobile, Ceramic and Tiles, Basic Metal, Cement, Food except Sugar for the period of 2003 to 2010, which were listed in Tehran Stock Exchange. In this research current ratio and working capital index were used as the indicator of liquidity. The result showed that there was great variation between industries with respect to the significant measure of liquidity. The study also showed that in spite the liquidity level being desirables and unavoidable at times, the companies having excessive liquidity lost their profits and unnecessary cost due to reduction in active liquidity management strategies.

Researcher tried to analyzed the working capital management of Cadila Healthcare Ltd. Researcher tried to make comparative trend and effectiveness of liquidity with the level maintenance of the working capital of the firm. The study showed that firm had sound situation of working capital and firm's liquid position was also sound. The result of return on the investment of the current assets was worst and showed ineffective output of the current assets.

The purpose of this research paper was to find out the relationship between cash conversion cycle and profitability. Researcher selected ten Indian cement firms which should be listed in Bombay Stock Exchange, for the period of 2005 to 2014. Researcher took Return on Investment and Return on Assets as dependent variables of profitability and independent variable was Cash Conversion Cycle. In this study Correlation and regression analysis were used to find out the result. The result of this study shown that there was no impact of cash management i.e. cash conversion cycle on the returns of Indian cement companies. The result also showed that there was no impact of cash conversion cycle on the return on assets of Indian cement companies. So, it could found that selected Indian cement industries may not aware about efficient cash management for increase profitability.

The main objective of the study is to find out the liquidity management in selected Indian pharmaceutical companies.

To examine the Liquidity performance of selected pharmaceutical companies.

To make comparative analysis of Liquidity performance of selected Pharmaceutical companies.

This study is based on secondary data. Researcher used different ratio to analyze the data. Ratio has been dividing in three groups such as liquidity ratios, performance ratios and efficiency ratios. In liquidity ratios include Current ratio, Quick ratio and Acid test ratio. Under performance ratio include Inventory turnover ratio, Debtors turnover ratio, Working capital/ Sales ratio and Assets turnover ratio. Inventory days ratio, Payable days ratio, Receivables days ratio and Cash conversion cycle ratio are in efficiency ratio. Statistical tool such as Kruskal-Wallis Test applied for data analysis.

K-S Test for Normality

H0: Data comes from normal distribution OR Data follows normal distribution

H1: Data does not follow normal distribution
### One-Sample Kolmogorov-Smirnov Test

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Current ratio</th>
<th>Quick ratio</th>
<th>Acid test ratio</th>
<th>Inventory turnover ratio</th>
<th>Debtor turnover ratio</th>
<th>Payable days</th>
<th>Average asset turnover ratio</th>
<th>Absolute Cash Liquidity ratio</th>
<th>Cash conversion cycle ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N</strong></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td><strong>Normal Parameters</strong></td>
<td>Mean</td>
<td>2.609</td>
<td>1.908</td>
<td>1.967</td>
<td>5.434</td>
<td>64.45</td>
<td>.6900</td>
<td>.2668</td>
<td>103.291</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>1.357</td>
<td>1.10305</td>
<td>1.531</td>
<td>92</td>
<td>96</td>
<td>19.74</td>
<td>534</td>
<td>41.9481</td>
</tr>
<tr>
<td><strong>Most Extreme Differences</strong></td>
<td>Absolute</td>
<td>.109</td>
<td>.110</td>
<td>.137</td>
<td>.106</td>
<td>.074</td>
<td>.076</td>
<td>.070</td>
<td>.314</td>
</tr>
<tr>
<td></td>
<td>Positive</td>
<td>.109</td>
<td>.110</td>
<td>.137</td>
<td>.106</td>
<td>.074</td>
<td>.076</td>
<td>.044</td>
<td>.294</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
<td>-.071</td>
<td>-.083</td>
<td>-.126</td>
<td>-.069</td>
<td>-.073</td>
<td>-.049</td>
<td>-.070</td>
<td>-.314</td>
</tr>
<tr>
<td><strong>Kolmogorov-Smirnov Z</strong></td>
<td>1.086</td>
<td>1.096</td>
<td>1.372</td>
<td>1.060</td>
<td>.738</td>
<td>.761</td>
<td>.702</td>
<td>3.142</td>
<td>.941</td>
</tr>
<tr>
<td><strong>Asymp. Sig. (2-tailed)</strong></td>
<td>.189</td>
<td>.181</td>
<td>.046</td>
<td>.211</td>
<td>.647</td>
<td>.608</td>
<td>.709</td>
<td>.000</td>
<td>.338</td>
</tr>
</tbody>
</table>

a Test distribution is Normal.

b Calculated from data.

In all above table (except working capital sales ratio), p-value is greater than 0.05 indicates that null hypothesis is not rejected. It shows that data follow normal distribution. Hence one can use parametric test for all ratio except working capital sales ratio. For Cash Liquidity ratio p-value is not greater than 0.05 indicates that null hypothesis is rejected. It shows that data does not follow normal distribution. Hence one cannot use parametric test.
Runs Test for randomness

H0: Data are random
H1: Data are not random

<table>
<thead>
<tr>
<th></th>
<th>Current ratio</th>
<th>Quick ratio</th>
<th>Acid test ratio</th>
<th>Inventory turnover ratio</th>
<th>Debtors turnover ratio</th>
<th>Payable days</th>
<th>Asset turnover ratio</th>
<th>Absolute cash liquidity ratio</th>
<th>Cash conversion cycle ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Value(a)</td>
<td>2.36</td>
<td>1.79</td>
<td>1.74</td>
<td>5.43</td>
<td>3.99</td>
<td>62.37</td>
<td>.70</td>
<td>.07</td>
<td>96.29</td>
</tr>
<tr>
<td>Cases &lt; Test Value</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>49</td>
<td>50</td>
<td>50</td>
<td>45</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Cases &gt;= Test Value</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>51</td>
<td>50</td>
<td>50</td>
<td>55</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Total Cases</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Number of Runs</td>
<td>22</td>
<td>24</td>
<td>20</td>
<td>20</td>
<td>24</td>
<td>27</td>
<td>28</td>
<td>27</td>
<td>31</td>
</tr>
<tr>
<td>Z</td>
<td>-.583</td>
<td>-.5427</td>
<td>-.6232</td>
<td>-.6230</td>
<td>-.5427</td>
<td>-.4824</td>
<td>-.4623</td>
<td>-.4772</td>
<td>4.020</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

a Median

As p-value is less than 0.05 indicates that null hypothesis is rejected. It shows that data are not random. Hence one cannot use parametric test (ANOVA).

H0: Different Ratios for Liquidity performance of different companies are not significantly different.

H1: Different Ratios for Liquidity performance of different companies are significantly different.
Kruskal-Wallis Test

Test Statistics (a,b)

<table>
<thead>
<tr>
<th></th>
<th>Current ratio</th>
<th>Quick ratio</th>
<th>Acid test ratio</th>
<th>Inventory turnover ratio</th>
<th>Debtors turnover ratio</th>
<th>Payable days</th>
<th>Asset turnover ratio</th>
<th>Absolute cash liquidity ratio</th>
<th>Cash conversion cycle ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>30.388</td>
<td>24.882</td>
<td>41.154</td>
<td>65.941</td>
<td>44.175</td>
<td>31.829</td>
<td>65.109</td>
<td>31.950</td>
<td>49.772</td>
</tr>
<tr>
<td>Df</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
<td>.003</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

a  Kruskal Wallis Test

b Grouping Variable: Name of Company

As p-value of Kruskal-Wallis Test is less than 0.05 which indicate that null hypothesis is rejected at 5% level of significance. It shows that Current Ratios of different companies are significantly different.

As p-value of Kruskal-Wallis Test is less than 0.05 which indicate that null hypothesis is rejected at 5% level of significance. It shows that Quick Ratios of different companies are significantly different.

As p-value of Kruskal-Wallis Test is less than 0.05 which indicate that null hypothesis is rejected at 5% level of significance. It shows that Acid Test Ratios of different companies are significantly different.

As p-value of Kruskal-Wallis Test is less than 0.05 which indicate that null hypothesis is rejected at 5% level of significance. It shows that Inventory Turnover Ratios of different companies are significantly different.

As p-value of Kruskal-Wallis Test is less than 0.05 which indicate that null hypothesis is rejected at 5% level of significance. It shows that Debtors Turnover Ratios of different companies are significantly different.

As p-value of Kruskal-Wallis Test is less than 0.05 which indicate that null hypothesis is rejected at 5% level of significance. It shows that Payable Days Ratios of different companies are significantly different.

As p-value of Kruskal-Wallis Test is less than 0.05 which indicate that null hypothesis is rejected at 5% level of significance. It shows that Asset Turnover Ratios of different companies are significantly different.

As p-value of Kruskal-Wallis Test is less than 0.05 which indicate that null hypothesis is rejected at 5% level of significance. It shows that Absolute Cash Liquidity Ratio of different companies are significantly different.

As p-value of Kruskal-Wallis Test is less than 0.05 which indicate that null hypothesis is rejected at 5% level of significance. It shows that Absolute Cash Conversion Cycle Ratio of different companies are significantly different.
CONCLUSION

After the interpretation of analysis it can be said that liquidity ratios, performance ratios and efficiency ratios of different companies are different so they have significant difference in their Liquidity performance. On the basis of these results the financial authorities can take proper future decisions to maintain liquidity which help them to increase the profit. The mean and standard deviation help them to compare their own company with others.

REFERENCES