



## Solvency Analysis of Selected Pharmaceutical Companies in India

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### ABSTRACT

*In this paper an attempt has been made to know the solvency position of selected pharmaceutical companies in India. The study covers top four pharmaceutical companies namely Lupin, Dr. Reddy's Lab, Cadila Healthcare & Cipla. The purpose of this study is to analyze the financial performance in terms of solvency of the selected companies. To achieve these objectives, data has been collected for five years from 2010-2011 to 2014-2015 from secondary sources and for getting results various kind of accounting technique like ratio and statistical tools like average, Standard Deviation and Co-efficient of variation have been applied.*

**KEYWORDS :** Solvency, Financial Performance, Liquidity

### 1.Introduction of Pharmaceutical Industry in India

The Indian pharmaceutical Industry is the world's third-largest in terms of volume. India has achieved an eminent global position in pharma sector. The Indian pharmaceutical Industry has been the front runner in a wide range of specialities involving complex drug manufacture, development, and technology. The pharmaceutical industry in India meets around 70% of the country's demand for bulk drugs, drug intermediates, pharmaceutical formulation, chemicals, tablets, capsules, orals and injectibles. The Indian pharma market size is expected to grow to US \$85 billion by 2020.

Liquidity or Solvency position of a company may be analyzed on the basis of short term and long term solvency or liquidity. Liquidity or short term solvency means the ability of the enterprise to meet short-term obligations as and when they become due. While long term solvency means the ability of the enterprise to meet long-term obligations on the due date. Long term solvency implies the capacity of the company to pay off the claims of debenture holders, preference shareholders and other long term creditors. The study concentrates on to ascertain the debt repayment capacity of the selected Pharmaceutical companies of India.

### 2.Review of Literature:

**Bhunia (2010)** have conducted study on Tata Steel Ltd & Lloyds Steel Industries Ltd for a period of 9 years (1997-98 to 2005-06). The study revealed that the negative deviations were significant due to decrease in current assets and also a simultaneous increase in current liabilities in case of both the companies. The study also concluded that all deviations of current assets are mainly due to decrease in the inventories and receivables. It was also found that receivable management is not good enough in case of the entire selected companies under the study.

**Bhunia (2011)** have conducted the study on two public sector drug pharmaceutical enterprises listed on BSE namely- Karnataka Antibiotics & Pharmaceuticals Ltd. (KAPL) & Rajasthan Drugs & Pharmaceuticals Ltd.(RDPL) for the period of 12 years from 1997-1998 to 2008-2009. The study revealed that liquidity position was strong in case of KAPL & it was so poor in case of RDPL and thereby reflecting the ability of the companies to pay short term obligations on due dates & they relied more on external funds in terms of long-term borrowings thereby providing a lower degree of protection to the creditors. **Khan (2011)** have conducted the study on four steel companies namely Tata Steel Ltd., Lloyds Steel Industries Ltd., Kalyani Steels Ltd & JSW Steel Ltd. for the period from 1997 to 2006. The study is conducted to examine the overall efficiency of the management of liquidity in selected companies. Liquidity position is very unsatisfactory in case of all selected steel companies except KSL. To remove poor liquidity position, efforts should be made to reduce current liabilities in order to improve liquidity position. The inventory management is required to be progressed in case of all the selected steel companies by way of proper application of inventory control system such as EOQ, JIT, ABC analysis etc. **Marimuthu (2012)** have made an attempt to analyze the performance of textile industry by selecting 5 companies of

Tamilnadu. For the purpose of analysis, researcher have used Ratio Analysis and various statistical techniques like Descriptive Statistics & ANOVA test. The study finally revealed that KPRML was efficient in generating income, assets & its overall efficiency was good. The study also revealed that all these companies should concentrate on their liquidity position, receivables, payables particularly on working capital. **Goel (2012)** has selected 5 FMCG companies namely HUL, Dabur India, Godrej Consumer, Marico and Colgate Palmolive for a period from 2006 to 2011 to measure the relative liquidity and solvency level in selected companies. The study found that there is no relationship between liquidity and solvency. He also found that the relatively low liquidity observed in firms was important to increasing profitability. It is also found that increased profitability from decreased solvency can be offset by increased solvency. **Panigrahi (2013)** has tried to study on the liquidity position of 5 leading Indian Cement companies namely Ambuja Cement, ACC Ltd., India Cements, Madras Cements and Shree Cements for a period of 10 years viz 2000-2001 to 2009-2010. The study found that liquidity position of small companies are better as compared to big ones and the growth rate of current ratio, quick ratio and working capital to current assets of all the companies are negative which indicates an unsound liquidity position. The study also revealed that low or negative working capital in some cases indicates the aggressive working capital management policy of the firms which implies minimum investment in current assets by the companies so as to derive a higher rate of return.

### 3. Objectives of the Study:

- 1 .To know the liquidity position of selected Pharmaceutical companies.
2. To know the financial performance of selected Pharmaceutical companies.

### 4.Research Methodology:

The study covers the period of five years from 2010-2011 to 2014-2015. Secondary data has been used to collect the data. In this study, in order to analyze the liquidity and solvency, various accounting ratios as well as various statistical tools such as Average, Standard Deviation and Co-efficient of variation have been used. The study has been made to analyze the liquidity position of selected companies and to concentrate on the companies' capacity to repay the short-term debt as well as long-term debt.

### 5. Analysis:

Following ratios have been computed for analyzing liquidity of Pharmaceutical Industry. Current Ratio (CR), Liquid Ratio (LR), Debtor's Turnover Ratio (DTR), Debt Equity Ratio (DER), Long Term Debt Equity Ratio (LTDER), Total Debts to Owners Fund Ratio (TDOFR), Interest Cover Ratio (ICR)

The ratio of current assets and current liabilities shows the ability of the companies to meet shorter debt obligations. Table:1 indicates during the study period, average of the current ratio is higher in Cipla. The S.D. of current ratio is very high in Lupin. The co-efficient of current ratio of Dr.Reddys is below the company average.

Table 2 shows that Quick ratio is more satisfactory in Dr.Reddys Lab (2.22) as the ratio is more than the company as a whole. It has been able to meet their current obligation under the study period. C.V. of current ratio of all selected companies except Dr.Reddys Lab (18.655%) shows more consistency than the company as a whole (15.668%) during the study period..

A high Debt Equity Ratio indicates more use of loan capital than equity capital. The high the DER, the more the risk & which resulted in to increase in profitability. A low DER indicates more use of equity capital than debt capital. Table:3 shows, a high debt equity ratio is observed in Cadila Health (0.388), which means, use of more debt capital. C.V. of DER of Dr.Reddys Lab & Cadila health is 15.75% & 31.69% respectively, which shows more consistency during the study period because C.V. of company as a whole is 60.61%. The other companies are more efficient in managing debt and equity capital.

Table 4 shows that ratio is high in Cadila Health (0.232). C.V. of Long Term Debts to Equity Ratio is higher in Lupin (127.07%) & Dr.Reddys Lab (56.76%) which shows less consistency during the study period because C.V. of industry as a whole is 39.59%.

Debtors Turnover Ratio indicates the efficiency of the credit and collection policy of the firm. A high ratio indicates the effective debt management. A low DTR indicates inefficiency in receivable management. Table 5 shows that DTR of Cadila Health is higher than the company as a whole. It implies the efficient management of debtor. C.V. of DTR of Dr.Reddys Lab & Cipla is 21.90% and 19.34% respectively, which shows less consistency during the study period as the C.V. of company as a whole is 13.72%.

The high the Total Debts to Owner Fund Ratio, the more is the risk and so also the profitability. A low ratio indicates more use of owner fund. Table 6 shows, a high Total Debts to Owner Fund Ratio is observed in Cadila Health (0.388), which means use of more debts capital as compared to owner's fund. C.V. of Total Debts to Owner Fund Ratio of Dr.Reddys Lab & Cadila Health is 15.75% & 31.69%, which shows more consistency during the study period because C.V. of company as a whole is 60.61%.

Interest coverage ratio expresses the ability of a company to pay interest on long-term loans out of its earning. Higher the ratio, the better is the ability of the company to meet its interest obligation. Table 7 shows during the study period, average of the interest coverage ratio is higher in Lupin (185.506). The standard deviation of Interest Cover Ratio is very high in Lupin (267.74). The coefficient of variation of Interest Cover Ratio of Cipla (48.06%) and Cadila Health (58.23%) is below the company average.

**Conclusion:**

Lupin, Dr.Reddys Lab & Cipla have been able to repay its debt during the study period. The result of Dr.Reddys Lab& Cadila Health shows a high Debt Equity ratio, it indicates that there is more investment of debt capital than equity. DTR of Cipla & Cadila Health shows the efficiency of debt management and DTR of rest of the companies shows unsatisfactory condition. The Total Debts to Owners Fund ratio of Dr.Reddys Lab & Cadila Health shows more use of debt capital as compared to owners capital. The interest coverage ratio is higher in Lupin which indicates better ability of the company to meet interest obligation.

**Abbreviations:**

- CR-Current Ratio
- QR-Quick Ratio
- DER-Debt Equity Ratio
- DTR-Debtors Turnover Ratio
- LTDER-Long Term Debts to Equity Ratio
- TDOFR-Total Debts to Owner Fund
- ICR -Interest Cover Ratio

**Table: 1 Current Ratio**

Year	Lupin	Dr.Reddys	Cipla	Cadila Health	Co. Av
2010-2011	1.1	1.66	2.17	1.63	1.640

2011-2012	1.19	1.7	2.59	1.22	1.675
2012-2013	1.59	1.62	3.18	1.03	1.855
2013-2014	2.81	1.96	1.95	1.35	2.018
2014-2015	2.54	1.81	1.92	1.19	1.865
Mean	1.846	1.750	2.362	1.284	1.284
SD	0.785	0.137	0.530	0.224	0.224
C.V.%	42.511	7.835	22.433	17.481	17.481

**Table:2 Quick Ratio**

Year	Lupin	Dr.Reddys	Cipla	Cadila Health	Co.Av
2010-2011	1.75	1.91	1.57	1.23	1.615
2011-2012	1.59	1.84	2.06	1.31	1.700
2012-2013	1.69	2.02	1.95	1.73	1.848
2013-2014	2.27	2.7	1.68	1.6	2.063
2014-2015	1.7	2.64	1.5	1.41	1.813
Mean	1.800	2.222	1.752	1.456	1.808
SD	0.269	0.415	0.243	0.206	0.283
C.V.%	14.948	18.655	13.861	14.172	15.668

**Table:3 Debt Equity Ratio**

Year	Lupin	Dr.Reddys	Cipla	Cadila Health	Co.Av.
2010-2011	0.31	0.24	0	0.27	0.205
2011-2012	0.27	0.23	0.07	0.43	0.250
2012-2013	0.11	0.2	0	0.57	0.220
2013-2014	0.02	0.29	0.11	0.39	0.203
2014-2015	0	0.29	0.09	0.28	0.165
Mean	0.142	0.250	0.054	0.388	0.209
SD	0.142	0.039	0.051	0.123	0.089
C.V.%	100.015	15.748	94.969	31.692	60.606

**Table:4 Long Term Debt Equity Ratio**

Year	Lupin	Dr.Reddys	Cipla	Cadila Health	Co.Av
2010-2011	0.07	0.09	0	0.25	0.103
2011-2012	0.04	0.08	0	0.27	0.098
2012-2013	0.01	0	0	0.27	0.070
2013-2014	0	0.1	0	0.24	0.085
2014-2015	0	0.09	0	0.13	0.055
Mean	0.024	0.072	0.000	0.232	0.082
SD	0.030	0.041	0.000	0.058	0.032
C.V.%	127.066	56.758	N.A.	25.207	39.586

**Table: 5 Debtors Turnover**

Year	Lupin	Dr.Reddys	Cipla	Cadila Health	Co.Av.
2010-2011	4.18	3.67	3.31	4.98	4.035
2011-2012	3.95	3.6	4.15	5.97	4.418

2012-2013	4.23	3.44	4.63	5.82	4.530
2013-2014	3.78	2.59	5.18	5.75	4.325
2014-2015	3.63	2.16	5.56	5.94	4.323
Mean	3.954	3.092	4.566	5.692	4.326
SD	0.256	0.677	0.883	0.408	0.556
C.V.%	6.479	21.899	19.342	7.166	13.721

**Table: 6 Total Debts to Owners Fund Ratio**

Year	Lupin	Dr.Reddys	Cipla	Cadila Health	Co.Av
2010-2011	0.31	0.24	0	0.27	0.205
2011-2012	0.27	0.23	0.07	0.43	0.250
2012-2013	0.11	0.2	0	0.57	0.220
2013-2014	0.02	0.29	0.11	0.39	0.203
2014-2015	0	0.29	0.09	0.28	0.165
Mean	0.142	0.250	0.054	0.388	0.209
SD	0.142	0.039	0.051	0.123	0.089
C.V.%	100.015	15.748	94.969	31.692	60.606

**Table: 7 Interest Cover Ratio**

Year	Lupin	Dr.Reddys	Cipla	Cadila Health	Co.Av
2010-2011	31.6	220.9	57.08	19.21	82.198
2011-2012	36.03	25.22	90.12	12.42	40.948
2012-2013	52.8	29.55	54.38	5.79	35.630
2013-2014	150.55	32.35	61.27	23.25	66.855
2014-2015	656.55	33.29	15.22	35.22	185.070
Mean	185.506	68.262	55.614	19.178	82.140
SD	267.743	85.385	26.730	11.167	97.756
C.V.%	144.331	125.084	48.064	58.230	93.927

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