A STUDY ON SOLVENCY AND LIQUIDITY POSITION ON SELECTED INDIAN PHARMA COMPANIES IN THE POST - LIBERALIZATION ERA

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Abstract
Today's business climate is characterized by rapid change and business owners and managers need readily available data to efficiently adapt to these changes to enable them to compete effectively with other companies. The Pharmaceutical Industry has been playing a crucial role in the social well being of the country by not only discovering, developing and manufacturing, but also distributing quality medicines. Indian pharmaceutical industry is on the entry of a new era with the introduction of the Intellectual Property Rights (IPR) regime. These articles focus on A Study On Solvency And Liquidity Position On Selected Indian Pharma Companies in the post-liberalization era.

Key Words: Indian Pharma Companies, Capital Gearing Ratio, Analysis of Long Term Solvency Ratios, Fixed Assets Ratio, Liquidity Ratios.

Introduction

Recently, Indian Pharmaceutical Industry (IPI) has shown tremendous progress in terms of infrastructure development, technology base creation and a wide range of products. The industry now manufactures bulk drugs belonging to all major therapeutic groups. The pharmaceutical industry has been described as the lifeline industry, signifying the crucial role in alleviating the suffering of diseased persons and controlling of various ailments that affect human being. The strong scientific and technical manpower has contributed for the development of this industry.

Driven by the knowledge skills, growing enterprise, low costs, improved quality and demand, the pharma sector has witnessed a tremendous growth over the past few years from a turnover of Rs. 5,000 crores in 1990-91 to over Rs. 50,000 crores during 2004-05. Exports have also grown very significantly to over Rs. 16,700 crores during this period. India is today recognized as one of the leading global players in the manufacture of pharmaceuticals. Drug exports have been growing by 30% annually.

Statement of the Problem

Global Rating Agency, 'FITCH' said that the Indian pharmaceutical shares remain stable during 2009. The profitability for Indian firm is likely to fall, owing to pricing pressure, increasing interest cost, foreign exchange fluctuation and stricter regulations in developed markets with product going off patent in the developed markets and demand for low cost drugs, rising competition on Indian and foreign generic players could become even more intense, resulting in cut throat pricing pressure and a consequent decrease in operating profits. Additionally, pharmaceutical companies face liquidity pressure because of longer working capital cycles. This is because of the gestation period for Indian firms is long as the time taken to develop a drug takes average of 8 years. The competitiveness of Indian low price and quality in the wealthy markets has attracted the attention of the large MNC's in recent years. Under these circumstances the following questions arise:

- How do the Indian leading pharma companies face competition?
- How do the selected financial variables influence the profitability of the selected pharma companies?

Based on the above, a study is made on how leading Indian pharmaceutical companies are performing are measured in terms of financial position, profitability.

So, the researcher is inclined to take up a study in these lines with the following objectives.

Objectives of the Study

The objectives of the study are as follows,

1. To study the growth and development of Indian pharma industry.
2. To analyse and compare financial position, profitability, of the selected Indian pharma companies.
3. To suggest better ways and means to improve the financial position, profitability, of Indian pharma companies.

Review of Literature

P. M. Rao (2008) in his study on " The Emergence of the Pharma Industry In The Developing World And Its Implications For Multinational Enterprise Strategies" mainly focusing on India and a lesser extent on China, examines, broadly two

related issues concerning the rise of pharma industry in the emerging economies. The strategic response of the emerging country pharma firms to the new patent regime that recognizes and enforces product patents and its implications for MN Enterprise strategies. It is based on extensive review of the relevant conceptual and empirical literature and secondary data.

Bahram Barzeger and K Nagendra Babu (2008) in their study on "The Effects Of Ownership Structure On Firms Performance: Evidence From Iran" investigates the relationship between ownership structure and corporate performance of top 50 companies listed on the Tehran Stock Exchange during the period of 2001-03. In the present study the ownership structure is considered in terms of institutional and non-institutional ownership. The study uses ROA, ROE and Tobin's Q ratios as measures of firm's performance.

Kaushik chakra borty (2008) in his study on "Working Capital And Profitability: An Empirical Analysis Of Their Relationship With Reference To Selected Companies In The Indian Pharmaceutical Industry" evaluates the relationship between the working capital and profitability of 25 selected companies in the Indian pharmaceutical industry during the period 1996-97 to 2007-08. Secondary data is used for the analysis. The main objective is to assess the influence of working capital on profitability of Indian pharmaceutical industry by computing Karl Pearson's correlation coefficient, spearman's rank correlation coefficient and Kendall's rank correlation coefficient between ROCE and Selected working capital related ratios.

Madhurie Modekurti (2009) in her study on "Performance of Business Group Firms VS Individual Firms in the Indian Transport Industry" examines the performance variations of group affiliated companies VS. Non-group affiliated companies of the Indian transportation sector. The major objectives of the study is to analyze and compare the performance of the group companies and stand along companies with in each category for over a period of 10 years (1997-2006) on the basis of parameters like net sales, NOPAT, ROCE. The study is based on secondary data.

Mahdi Salehi, Hashem Valipour and Sharham Shafiei (2009) in their study on "An Empirical Study of the Effect of Capital Structure on the Profitability of Listed Companies in Tehran Stock Exchange" examines the effect of capital structure on the profitability of listed companies in Tehran stock exchange. The purpose of this research is to study the effect of capital structure on the profitability of listed companies in Tehran stock change. 100 companies belonging to 13 different industries were selected as the statistical sample

Scope of the Study
The present study analyses the performance of the selected pharmaceutical companies. The study analyses the financial position profitability and operational efficiency of the selected Indian pharmaceutical companies using financial ratios, profitability ratios, and liquidity ratios.

Importance of Indian Pharma Industry and Need for the Study
The pharmaceutical industry has been associated with saving lives of people and it has always been held in high esteem. One of the primary indicators of development in a country is the availability of health care in the country. It is related to product as well as to services. The various drugs discovered and developed are its products and the health care it provides comes under the category of services.

The introduction of product patents has important implications for both Indian pharma companies and pharma MNCs. After 2005, Indian companies increasingly need to look beyond the domestic generic market to sustain their sales, since their traditional strategy of copying on patent drug will no longer be allowed. They will consequently need to look towards export markets and focus on product innovation. In pursuing the regulated markets, the more successful Indian firms are faced with a similar strategic choice in how to achieve such growth whether to cooperate or compete with the large international pharma companies.

Research Design and Methodology
Source of Data
The study relies mainly on secondary data collected from the official directory of database of the Center for Monitoring Indian Economy (CMIE) namely PROWESS. Data on required financial information have also been collected from the company's websites, magazines, journals, bulletins and annual reports etc.

Period of Study
The study covers a period of 12 years from 1996-97 to 2007-08.

Sampling Design
The present study is confined to pharmaceutical industry. The data related to 634 companies are compiled in CMIE database. Of which 219 companies are listed in the Bombay Stock Exchange. The sample for the study constitute 8 leading Indian pharma companies and 8 leading pharma MNC's selected from these 219 companies on the basis of the following parameters using judgment sampling.

The parameters used for the selection of sample companies under the study are given below:
1. Companies having a minimum sales turnover of Rs.300 crores per annum and market capitalization rate more than Rs.500 crores during the year ended 2007-08.
2. Companies having continuous financial data for the last 12 years starting from 1996-97 to 2007-08 to ensure uniformity of data.

Market Capitalization

Table 1: Classification of Sample Companies Based on Sales Turnover and Market Capitalization

Company Name	Sales turnover (Rs. In Crores)	Market capitalization (Rs. In Crores)
Indian Pharma Companies		
Dr. Reddy's labs	3615.35	9277.45
Cipla Ltd	4295.24	16022.02
Ranbaxy labs	3656.2	14515.31
Piramal Healthcare	2001.32	6014.5
Aurobindo Pharma	2409.28	1328.88
Ipca labs	1145.94	1267.23
Sun Pharma	2427.35	26602.91
Cadila Healthcare	1758.5	3914.52

Source: CMIE Prowess database

Framework of Analysis
The secondary data were collected from different sources for the purpose of calculating financial ratios, profitability ratios, operational efficiency ratios, inter-firm performance, working cycles and financial variables for the study. Statistical tools like Mean, Standard deviation, Co-efficient of Variation, t- Test, correlation, and multiple regressionsare used for the study.

Descriptive Statistics
The descriptive statistics includes mean, standard deviation, co-efficient of variation.

Limitations of the Study
1. The study is based on the secondary data and it may carry all the limitations inherent with secondary data and financial information.
2. The analysis considers the selected pharma companies for a period of 12 years only and the results are not applicable to other companies in the pharma industry. So a generalization is not possible.
3. The sample companies are the leading pharma companies and they did not follow the uniform accounting period. The financial data are organized in such a way that they relate to twelve months of the relevant accounting year. Hence, the findings cannot be applied for other pharma companies.
4. The ratios and statistical tools used in the study have their own limitations

Analysis of Long Term Solvency Ratios
Capital Gearing Ratio
The term "Capital gearing" is used to describe the relationship between equity share capital including Reserves and Surplus, preference share capital and other fixed interest – bearing loans.

Table 2: Capital Gearing Ratio (X1)

Company Name	Mean (%)	SD	CV (%)
Indian Companies			
Dr. Reddy's labs	0.210	0.196	**106.7**
Cipla	**0.093**	0.065	143.3
Ranbaxy labs	0.285	0.246	115.8
Pirmal healthcare	0.462	0.235	196.4
Aurobindo	**0.655**	0.118	556.8
Ipca labs	0.502	0.091	554.7
Sun pharma	0.241	0.199	121.1
Cadila healthcare	0.491	0.234	209.9
Overall	**0.367**	**0.188**	**51.22**

Source: Compiled from Annual Reports of the Companies

The above table indicates that the mean Capital Gearing Ratio is ranged between 0.093 in Cipla to 0.655 in Aurobindo among Indian Pharma Companies with the overall mean of 0.367 and a coefficient of variation of 51.22 %. The performance was consistent in Dr. Reddy's Labs compared with other companies as the coefficient of variation of this ratio was least (106.7%).

Proprietary Ratio or Equity Ratio (X2)

Table 3: Proprietary Ratio (X2)

Company Name	Mean (%)	SD	CV (%)
Indian Companies			
Dr. Reddy's labs	**0.031**	0.021	68.42
Cipla	0.038	0.016	41.85
Ranbaxy labs	0.044	0.014	32.87
Pirmal healthcare	0.055	0.017	**30.18**
Aurobindo	0.024	0.014	58.05
Ipca labs	0.035	0.01	28.02
Sun pharma	**0.063**	0.047	74.01
Cadila healthcare	0.044	0.023	52.39
Overall	**0.042**	**.013**	**30.40**

Source: Compiled from Annual Reports of the Companies

The above table indicates that the mean Proprietary Ratio is ranged between 0.031 in Dr. Reddy's labs to 0.063 in Sun pharma among Indian Pharma Companies with the overall mean of 0.042 and a coefficient of variation of 30.40 %. The performance was consistent in Pirmal healthcare compared with other companies as the coefficient of variation of this ratio was least (30.18%).

Debt- Equity Ratio (X3)
Debt – equity ratio is calculated to measure the relative claims of outsiders and the owners (i.e. shareholders) against the firm's assets. The debt- equity ratio is determined to ascertain the soundness of the long-term financial policies of the company

Table 4: Debt Equity Ratio (X3)

Company Name	Mean	Sd	Cv (%)
Indian Companies			
Dr. Reddy's labs	0.239	0.242	101.100
Cipla	0.093	0.066	71.1340
Ranbaxy labs	0.407	0.475	116.800
Pirmal healthcare	0.633	0.385	60.815
Aurobindo	**1.108**	0.388	35.005
Ipca labs	0.672	0.142	**21.187**
Sun pharma	0.368	0.516	140.410
Cadila healthcare	**0.044**	0.059	133.93
Overall	**0.446**	**.351**	**78.720**

Source: Compiled from Annual Reports of the Companies

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The above table indicates that the mean Debt Equity Ratio is Ranged Between 0.044 In Cadila Healthcare To 1.108 In Aurobindo Among Indian Pharma Companies With The Overall Mean Of 0.446 And A Coefficient Of Variation Of 78.72 %. The Performance Was Consistent In Ipca Labs Compared with other Companies as the Coefficient Of Variation Of this Ratio Was Least (21.187%).

Fixed Assets Ratio (X4)
The ratio establishes the relationship between fixed Assets to long term funds of the firm. This ratio explains whether the firm has raised adequate long term funds to meet its fixed assets requirements. The ideal ratio is 0.67.

Table 5: Fixed Asset Ratio

Company Name	Mean (%)	SD	CV (%)
Indian Companies			
Dr. Reddy's labs	**0.545**	0.145	26.614
Cipla	0.553	0.052	9.4923
Ranbaxy labs	0.702	0.188	26.839
Pirmal healthcare	**0.858**	0.178	20.738
Aurobindo	0.563	0.101	17.929
Ipca labs	0.674	0.058	**8.578**
Sun pharma	0.596	0.114	19.101
Cadila healthcare	0.792	0.154	19.482
Overall	**0.660**	**0.118**	**17.80**

Source: Compiled from Annual Reports of the Companies

The above table indicates that the mean Fixed Asset Ratio is ranged between 0.545 in Dr. Reddy's labs to 0.858 in Pirmal healthcare among Indian Pharma Companies with the overall mean of 0.660 and a coefficient of variation of 17.80 %. The performance was consistent in Ipca labs compared with other companies as the coefficient of variation of this ratio was least (8.578%).

Interest Coverage or Debt Service Ratio (X5)
The ratio establishes the relationship between Net profit before interest and taxes to fixed interest charges of the firm. This ratio is used to test the debt- servicing capacity of a firm.

Table 6: Interest Coverage Ratio (X5)

Company name	Mean(times)	SD	CV (%)
Indian Companies			
Dr. Reddy's labs	**131.2**	248.1	189.12
Cipla	103.5	77.05	74.442
Ranbaxy labs	20.65	32.65	158.15
Pirmal healthcare	4.416	1.815	**41.109**
Aurobindo	**4.000**	1.786	44.659
Ipca labs	8.060	7.594	94.218
Sun pharma	67.26	84.44	125.54
Cadila healthcare	6.403	2.874	44.88
Overall	**43.19**	**50.846**	**117.70**

Source: Compiled from Annual Reports of the Companies

The above table indicates that the mean Interest Coverage Ratio is ranged between 4 in Aurobindo to 131.2 in Dr. Reddy's labs among Indian Pharma Companies with the overall mean of 43.19 and a coefficient of variation of 117.70 %. The performance was consistent in Pirmal healthcare compared with other companies as the coefficient of variation of this ratio was least (41.109%).

Short Term Financial Position or Liquidity Ratios
Current Ratio (X6)
Current Ratio may be defined as the relationship between current Assets and current liabilities. In indicates the availability of current assets in rupees for every one rupee of current liability and ease of turning assets into cash. This ratio is an indicator of the firm's commitment to meet its short term liabilities. It is expressed in terms of times. An ideal current ratio is 2:1.

Table 7: Current Ratio (X6)

Company Name	Mean(Times)	SD	CV (%)
Indian Companies			
Dr. Reddy's labs	2.558	1.039	40.626
Cipla	1.947	0.281	**14.414**
Ranbaxy labs	1.631	0.413	25.334
Pirmal healthcare	**1.385**	0.534	38.582
Aurobindo	1.759	0.288	16.369
Ipca labs	1.726	0.144	8.351
Sun pharma	**3.341**	1.42	42.517
Cadila healthcare	1.678	0.719	42.857
Overall	**2.003**	**0.639**	**31.93**

Source: Compiled from Annual Reports of the Companies

The above table indicates that the mean Current Ratio is ranged between 1.385 in Pirmal healthcare to 3.341 in Sun Pharma among Indian Pharma Companies with the overall mean of 2.003 and a coefficient of variation of 31.93 %. The performance was consistent in Cipla labs compared with other companies as the coefficient of variation of this ratio was least (8.351%).

Absolute Liquid Ratio (X7)
This is a variation of quick ratio. Debtors are excluded from liquid assets for the purpose of computing super-quick ratio. An ideal ratio of Absolute liquid Ratio is 50% or 0.5:1.

Table 8: Acid Ratio (X7)

Company Name	Mean(Times)	SD	CV (%)
Indian Companies			
Dr. Reddy's labs	0.675	0.69	102.244
Cipla	**0.032**	0.032	101.512
Ranbaxy labs	0.066	0.03	46.008
Pirmal healthcare	0.112	0.155	138.567
Aurobindo	0.133	0.132	98.845
Ipca labs	0.026	0.008	**30.695**
Sun pharma	**1.007**	1.416	140.668
Cadila healthcare	0.305	0.769	252.118
Overall	**0.295**	**0.359**	**122.100**
	-0.205	0.173	-1.189(NS)

Source: Compiled from Annual Reports of the Companies

The above table indicates that the mean Absolute liquid Ratio is ranged between 0.032 in Cipla to 1.007 in Sun Pharma among Indian Pharma Companies with the overall mean of 0.295 and a coefficient of variation of 122.100 %. The performance was consistent in Ipca labs compared with other companies as the coefficient of variation of this ratio was least (30.695%).

Net Working Capital Ratio (X8)
Net working capital ratio is the relationship between Net Working Capital and Net Assets. Net working capital is also a measure of firm's liquidity. It indicates the firm's potential reservoir of funds.

Table 9: Net Working Capital Ratio (X8)

Company Name	Mean(times)	SD	CV (%)
Indian Companies			
Dr. Reddy's labs	0.509	0.108	21.192
Cipla	0.502	0.048	**9.647**
Ranbaxy labs	0.391	0.126	32.091
Pirmal healthcare	0.308	0.077	25.095

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Aurobindo	**0.555**	0.069	12.398
Ipca labs	0.477	0.075	15.793
Sun pharma	0.434	0.096	22.177
Cadila healthcare	**0.348**	0.23	66.128
Overall	**0.441**	**0.086**	**19.48**

Source: Compiled from Annual Reports of the Companies

The above table indicates that the mean Net Working Capital Gearing Ratio is ranged between 0.348 in Cadila healthcare to 0.555 in Aurobindo among Indian Pharma Companies with the overall mean of 0.441 and a coefficient of variation of 19.48 %. The performance was consistent in Cipla compared with other companies as the coefficient of variation of this ratio was least (9.647%).

Suggestions
- The government takes effort to reduce bottlenecks in Indian pharma R and D in India. It will be very helpful to aid the industry to devise and implement strategies for survival.
- To generate awareness that intellectual property rights may not affect the innovation of Indian pharma companies
- The introduction of product patents has important implications for both Indian and western pharmaceutical companies. After 2005, Indian companies will increasingly need to look beyond the domestic generics market to sustain their sales, since their traditional strategy of copying on-patent drugs will no longer be allowed. They will consequently need to look forward export markets and focus on product innovation In order to compete with more experienced and better endowed Pharma MNCs, Indian pharma companies should invest more funds in R and D expenditure.
- Total assets should be effectively used by Indian pharma companies.

Conclusion
Indian pharmaceutical industry under tremendous pressure due to new product patent regime, it can still exploit the situation because India is a very lucrative destination for the global majors because of its inherent strengths, low cost manufacturing, strong reengineering skills, talented human resource at low cost. FERA imposed several investment and ownership restriction on multinational companies, some of which are to be relaxed under the new product patent amendment during 2005. As for as pharma MNCs concerned they don't have bulk drug production capabilities in India, they are unable to compete on cost and a perception among most Indian doctors that MNCs lack in-depth knowledge about each therapeutic segment and that they over prices their drugs in India. Under this situation, based on the present study, Indian pharma companies improve their performance in order to compete with the competitors.

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