PROFITABILITY ANALYSIS OF SELECTED INDIAN PHARMACEUTICAL COMPANIES

KEYWORDS

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INTRODUCTION

Industries play an important role in the economic development of any nation. Industries make the country self reliant by fulfilling the various needs of the people. In India, industrial economy is dominated by various industries like, automobile, iron and steel, real estate, cement, tourism, energy, textile, airlines, pharmaceutical, biotechnology, electronics, hardware and power industry. Of them, pharmaceutical industry is one of the fasted growing and life saving sector. The sector is unique as it traverses across geographies. Moreover, as health has no boundaries, this very boundary-less nature supports consolidation in this industry.

The pharmaceutical industry plays a key role in promoting and sustaining development in the field of medicines. From simple headache pills to sophisticated antibiotics and complex cardiac compounds, almost every type of medicine is now made indigenously

The Indian pharmaceutical industry is at present enjoying a top rank among the developing nations with wide ranging capabilities in the complex field of drug manufacturing and technology used. It ranks very high in the third world, in terms of technology, quality and range of medicines manufactured The Pharmaceutical sector in India is highly fragmented with more than 10,000 listed and unlisted companies. India is one of the fastest-growing pharmaceutical markets in the world, and its market size has nearly doubled since 2005.There are approximately 300 large companies and over 10,000 medium and small scale companies in the sector, of which 77 per cent units manufacture formulations and 23 per cent of units manufacture APIs. The pharma sector has a significant presence of small and medium companies with revenues of around Rs. 60,000 crore which contribute to 40 per cent of volume and value and the balance is contributed by large companies with revenue more than Rs 90,000 crore. These API manufacturers not only export 50 per cent of their production to various countries, but also meet majority requirements of the domestic formulations units.The country's pharmaceutical industry accounts for about 1.4 per cent of the global pharmaceutical industry in value terms and 10 per cent in volume terms.

Financial ratios are useful indicators to measure a company's performance and financial situation. The present study aims to analyze the liquidity and profitability performance of selected Indian pharmaceutical companies.The ratio is a simple arithmetical expression of the relationship of one number to another. The ratio analysis is one of the most powerful tools of financial analysis. It is the process of establishing and interpreting various ratios. It is with the help of ratios that the financial statements can be analyzed more clearly. With the help of ratio analysis financial executives can measure whether the firms at present are financially healthy or not. They highlight the liquidity, solvency and profitability of the firm.

NEED FOR THE STUDY

Analysis of profit is of vital concern to stockholders since they derive revenue in the form of dividends. Profitability can be defined as the final measure of economic success achieved by a company in relation to the capital invested in it. Profits are also important to creditors because profits are one source of funds for debt coverage. Furthermore, Management uses profit as a performance measure.

SCOPE OF THE STUDY

The study focuses about the financial performance of selected pharmaceutical companies in India. This research is based on cross sectional analysis which means comparing of one firm with another firm in the same industry at the same point in time. Moreover, the findings of the study provide some guiding principle for minimizing problems associated with the liquidity and solvency management. The study has taken financial, accounting and quantitative data covering a period of fifteen years from the financial year 2000-01 to 20014-15.

OBJECTIVES OF THE STUDY
* To study the growth and development of selected Pharmaceutical companies
* To know the profitability position of selected Pharmaceutical companies

HYPOTHESESOF THE STUDY

There is no significant difference in the mean values of financial ratios between the selected pharmaceutical companies and the years.

RESEARCH DESIGN

The universe of Indian pharmaceutical companies consists of Presently there are 10,500 manufacturing units and over 3,000 pharma companies in India, growing at an exceptional rate. Out of top 15 listed companies in BSE, irrespective of their size to see to what extent they are profitable, financially strength, and liquidable.

The selected top most companies is followed by the financial year (i.e.) starting from 1st

April to 31st March. The companies are
1. Lupin ltd
2. Dr.Reddy's Labs
3. Aurobindo pharma
4. Sun pharmaceutical industries ltd
5. Cardila health care
6. Glenmark
7. Torrent pharma
8. Gsk(Glaxo Smith Kline)
9. Ipca labs
10. Abbott India ltd
11. Biocon
12. Sanofi India ltd
13. Pfizer
14. Novartis India
15. Ajanta pharma

Period of study:The study covers a period of 15 years covering a

period from **2000-01 to 2014-15.** The universe of Indian Pharmaceutical Companies consists of top 15 companies based on net sales (BSE). It is also decided by taking into consideration of the availability of data.

TOOLS FOR ANALYSIS
The following are the types of profitability ratios:
*   Gross profit ratio
*   Operating ratio
*   Operating profit ratio
*   Net profit ratio
*   Return on fixed assets
*   Return on assets
*   Return on net worth
*   Return on capital employed The role of statistical tools is important in analyzing the data and drawing inferences there from. In order to derive the results from the information collected through secondary data, various statistical tools such as **Mean, Standard Deviation, Coefficient of Variance, Compound Average Annual Growth Rate, Average Annual Growth Rate, Anova, and Trend Analysis** has been accomplished through EXCEL and SPSS software.

LIMITATIONS OF THE STUDY
The analysis and interpretation are based only on the past performance, since there are no standards established in the company with which the actual performance could be compared.
*   The study covers the period of 15 years between 2000-01 and 2014-15 only. It does not consider the changes that have been taken place before and after the period
*   Only a few factors determining the liquidity, solvency and profitability were considered for the purpose of study
*   The present study is largely based on ratios, which have been its own limitations.

FINDINGS
*   In **gross profit ratio,** the highest average found is 46.41 in Pfizer Ltd. The lowest consistency is seen in IPCA Ltd since its CV is 0.05. The highest CAGR value is found in Glenmark Ltd is 26.80. The highest AAGR value is found in Glenmark Ltd is 33.04. The difference in capital turnover ratio is significance between the years and significance between the companies.

*   In **operating ratio,** the highest average found is 442.30 in Novartis India Ltd. The lowest consistency is seen in IPCA Ltd and Abbott India Ltd since its CV is 0.04. The highest CAGR value is found in Glenmark Ltd is 3.19. The highest AAGR value is found in Sun Pharmaceutical Industry Ltd is 4.24. The difference in operating ratio is insignificance between the years and significance between the companies.

*   In **operating profit ratio,** the highest average found is 38.00 in Glaxo Smith Kline Ltd. The lowest consistency is seen in IPCA Ltd since its CV is 0.11. The highest CAGR value is found Aurobindo Pharma Ltd is 2.42. The highest AAGR value is found in Dr.Reddy's Ltd is 3.23. The difference in operating ratio is insignificance between the years and significance between the companies.

*   In **net profit ratio,** the highest average found is 25.68 in Sun Pharmaceutical Industry Ltd. The lowest consistency is seen in IPCA Ltd and Novartis India Ltd since its CV is 0.25. The highest CAGR value is found Lupin Ltd is 9.32 . The highest AAGR value is found in Ajanta Pharma Ltd is 96.21. The difference in net profit ratio is insignificance between the years and significance between the companies.

*   In **Return on fixed assets ratio,** the highest average found is 23.80 in Abbott India Ltd. The lowest consistency is seen in Cardila Health Care Ltd since its CV is 0.25. The highest CAGR value is found Ajanta Pharma Ltd is 18.98. The highest AAGR value is found in Aurobindo Pharma Ltd is 39.99. The difference in Return on fixed assets ratio is insignificance between the years and significance between the companies.

*   In **return on assets ratio,** the highest average found is 15.34 in Sanofi India Ltd. The lowest consistency is seen in Cardila Health Care Ltd since its CV is 0.29. The highest CAGR value is found Ajanta Pharma Ltd is 14.81. The highest AAGR value is found in Ajanta Pharma Ltd is 190.53. The difference in return on assets ratio is insignificance between the years and significance between the companies.

*   In **return on net worth,** the highest average found is 29.38 in Glaxo Smith Kline Ltd. The lowest consistency is seen in Torrent Pharma Ltd since its CV is 0.22. The highest CAGR value is found Ajanta Pharma Ltd is 15.20. The highest AAGR value is found in Ajanta Pharma Ltd is 250.66.. The difference in return on net worth ratio is insignificance between the years and significance between the companies.

*   In **return on capital employed,** the highest average found is 13.99 in Glaxo Smith Kline Ltd. The lowest consistency is seen in Pfizer Ltd since its CV is 0.18. The highest CAGR value is found Ajanta Pharma Ltd is 17.23. The highest AAGR value is found in Dr.Reddy's Ltd is 15.15. The difference in return on capital employed is significance between the years and significance between the companies.

*   In **cash profit ratio,** the highest average found is 1.86 in Ajanta Pharma Ltd. The lowest consistency is seen in Abbott India Ltd since its CV is 0.38. The highest CAGR value is found Pfizer Ltd is 13.10. The highest AAGR value is found in Ajanta Pharma Ltd is 193.61. The difference in cash profit ratio is insignificance between the years and significance between the companies.

*   In **earnings per share ratio,** the highest average found 135.98 in Biocon Ltd. The lowest consistency is seen in Novartis India Ltd since its CV is 0.32. The highest CAGR value is found Sanofi India Ltd is 17.36. The highest AAGR value is found in Glenmark Ltd is 22.08. The difference in earnings per share ratio is insignificance between the years and significance between the companies

*   In **expenses ratio,** the highest average found 12.51 in Ajanta Pharma Ltd. The lowest consistency is seen in Glaxo Smith Kline Ltd since its CV is 0.08. The highest CAGR value is found Novartis India Ltd is 4.52. The highest AAGR value is found in Sun Pharmaceutical Industry Ltd is 19.96. The difference in expenses ratio is significance between the years and significance between the companies

*   In **price earnings ratio,** the highest average found 3091.17 in Glaxo Smith Kline Ltd .The lowest consistency is seen in Novartis India Ltd since its CV is 0.30. The highest CAGR value is found Lupin Ltd is 51.57. The highest AAGR value is found in Lupin Ltd is 655.79. The difference in price earnings ratio is insignificance between the years and significance between the companies

*   Regarding **net profit,** there is a significant relationship between the actual and trend values in Lupin Ltd, Dr.Reddy's Ltd, Aurobindo Pharma Ltd, Cardila Health Care Ltd, Glenmark Ltd, Torrent Pharma Ltd, Glaxo Smith Kline Ltd, IPCA Ltd, Abbott India Ltd, Biocon Ltd, Sanofi India Ltd, Pfizer Ltd, Novartis India Ltd, and Ajanta Pharma Ltd while in the case of Sun Pharmaceutical Industries Ltd there is no significant relationship between actual and trend values of net profit.

- Regarding **earnings per share,** there is a significant relationship between the actual and trend values in Dr.Reddy's Labs Ltd, Cardila Health Care Ltd, Torrent Pharma Ltd, Glaxo Smith Kline Ltd, Abbott India Ltd, Sanofi India Ltd, Pfizer Ltd, Novartis India Ltd and Ajanta Pharma Ltd while in the case of Lupin Ltd, Aurobindo Pharma ltd, Sun Pharmaceuticals Industries ,Glenmark Ltd,Ipca Labs Ltd,Biocon Ltd there is no significant relationship between actual and trend values of earnings per share.

SUGGESTIONS

- The gross profit ratios of companies like Dr.Reddy's Labs Ltd, Glenmark Ltd, Glaxo Smith Kline Ltd shows negative growth in study period. Hence it is suggested that they have to concentrate on profit taking measures by increasing the selling price without changes in cost of goods sold to survive in future with more efficiency.

- The operating profit ratios of companies like Lupin Ltd and Novartis India Ltd shows negative growth in study period hence it is suggested they have to reduce labor and operation costs and must initiate proper auditing of company's activities to reduce wastages. This will help them to increase their operating profit.

- The return on capital employed ratios of companies like Lupin Ltd and Novartis India shows negative growth in study period it is suggested that the companies have to reduce their outstanding liabilities and also have to reduce their spending habits.

CONCLUSIONS

On the basis of critical evaluation of profitability analysis of sample companies, it is observed that the in spite of high competition, the pharmaceutical industry is one of the most profitable industries. To sum up, the adoption of above said suggestive measures will certainly help the selected units to improve their financial performances. It is concluded that the overall performance of pharmaceutical industry is at satisfactory level. Thus, the growth and all round development of this industry has a direct bearing on the improvement of India's economy.

ANOVA FOR EARNINGS PER SHARE OF SELECTED PHARMA-CEUTICAL COMPANIES

S. no	Name of the company	R^2	F-value	p-value	S/NS
1	Lupin Ltd	0.06	0.76	0.40	NS
2	Dr.Reddy's Labs Ltd	0.35	7.04	0.02	S
3	Aurobindo Pharmaltd	0.01	0.07	0.79	NS
4	Sun Pharmaceuticals Industries	0.25	4.44	0.06	NS
5	Cardila Health Care Ltd	0.66	25.63	0.00	S
6	Glenmark Ltd	0.00	0.02	0.88	NS
7	Torrent Pharma Ltd	0.39	8.46	0.01	S
8	Glaxo Smith Kline Ltd	0.61	20.35	0.00	S
9	Ipca Labs Ltd	0.03	0.45	0.52	NS
10	Abbott India Ltd	0.55	16.10	0.00	S
11	Biocon Ltd	0.25	4.22	0.06	NS
12	Sanofi India Ltd	0.86	82.18	0.00	S
13	Pfizer Ltd	0.30	5.45	0.04	S
14	Novartis India Ltd	0.37	7.54	0.02	S
15	Ajanta Pharma Ltd	0.77	44.15	0.00	S

$p<0.05$ S-Significant   NS-Not Significant

ACTUAL AND TREND VALUE FOR EARNINGS PER SHARE OF SELECTED PHARMACEUTICALS COMPANIES
(RS. IN CRORES)

LUPIN LTD		DR.REDDY'S LABS LTD		AUROBINDO PHARMA LTD		SUN PHARMACEUTICALS INDUSTRIES LTD		CARDILA HEALTH CARE LTD	
Actual	Trend	Actual	Trend	Actual	Trend	Actual	Trend	Actual	Trend
183.63	61.58	45.73	28.28	34.15	30.62	28.91	39.59	11.01	8.42
17.98	59.39	60.07	31.91	33.14	31.01	36.05	37.34	11.27	10.92
18.20	57.19	51.24	35.54	44.36	31.40	24.82	35.08	12.87	13.42
23.69	55.00	37.01	39.17	25.02	31.79	25.94	32.82	22.75	15.93
20.50	52.80	8.55	42.80	6.91	32.17	16.52	30.57	20.92	18.43
44.59	50.60	27.53	46.43	13.02	32.56	24.84	28.31	26.26	20.93
37.09	48.41	70.09	50.06	42.94	32.95	32.52	26.06	16.30	23.43
54.02	46.21	28.26	53.69	54.08	33.33	48.96	23.80	18.80	25.93
50.35	44.02	33.29	57.32	23.91	33.72	61.09	21.55	19.48	28.44
72.96	41.82	50.11	60.95	94.34	34.11	43.39	19.29	36.87	30.94
18.15	39.62	52.78	64.58	20.40	34.49	13.36	17.03	29.81	33.44
18.01	37.43	53.81	68.21	-1.46	34.88	16.41	14.78	32.11	35.94
28.16	35.23	74.54	71.84	17.03	35.27	4.99	12.52	24.35	38.45
52.51	33.04	113.63	75.47	40.21	35.66	-13.66	10.27	44.13	40.95
53.34	30.84	98.64	79.10	51.93	36.04	-7.12	8.01	62.08	43.45
y = -2.1959x + 63.78		y = 3.6302x + 24.645		y = 0.387x + 30.237		y = -2.2556x + 41.846		y = 2.5022x + 5.9167	

YEAR	LUP LTD	DR.R LTD	AUR LTD	SUN LTD	CAR LTD	GEN LTD	TOR LTD	GSK LTD	IPCA LTD	ABB LTD	BIO LTD	SANO LTD	PFIZ LTD	NOV LTD	AJA LTD
2000-01	45.00	-513.8	23.63	52.23	42.29	-84.54	50.75	-609.20	37.11	42.19	31.54	36.23	50.82	34.59	42.11
2001-02	46.53	-699.85	21.73	51.24	43.44	-125.18	49.41	-769.49	39.18	41.86	28.35	38.16	52.56	39.77	48.04
2002-03	36.52	-799.67	27.09	56.11	43.62	-147.13	47.84	-695.63	38.84	43.77	35.23	37.52	48.44	36.12	43.93
2003-04	37.22	-1024.6	27.88	43.53	39.27	-178.13	47.64	-691.48	38.00	43.84	37.77	41.38	43.23	37.46	39.98
2004-05	27.57	-1081.2	22.06	28.45	39.52	-259.28	42.30	-774.69	39.71	42.05	37.62	46.62	45.10	41.13	32.56
2005-06	33.15	-1385.2	19.32	19.10	39.53	-316.49	41.67	-811.16	36.20	31.76	33.21	42.45	46.95	40.56	34.08
2006-07	30.95	-2102	21.39	13.70	41.38	-443.25	39.90	-813.66	38.70	29.58	32.46	42.93	50.82	45.02	33.15
2007-08	35.79	-2288.7	23.55	22.76	40.36	-662.23	39.83	-825.42	37.47	30.14	32.71	43.33	49.11	46.94	37.92

2008-09	32.58	-2716.5	25.70	18.62	35.81	-430.39	40.29	-863.41	37.74	28.21	31.46	41.60	48.11	49.05	40.55
2009-10	32.47	-2816.1	28.78	32.44	30.87	-494.41	43.86	-947.47	37.50	30.46	32.91	37.28	43.85	50.50	39.02
2010-11	30.24	-3491.9	28.86	30.37	31.19	-663.01	41.73	-1059.00	36.15	28.50	38.03	36.71	40.47	51.36	40.15
2011-12	32.69	-3784.8	21.06	32.84	30.75	-881.27	39.44	-1225.29	38.46	33.34	28.93	36.13	42.26	49.47	39.87
2012-13	36.44	-4736.6	25.53	35.63	25.03	-1131.53	45.23	-1491.26	37.79	31.29	32.88	34.65	47.54	43.72	42.90
2013-14	40.67	-5097.3	34.03	35.23	30.43	-1304.81	51.36	-1538.62	42.18	32.54	33.00	36.77	48.77	37.77	48.68
2014-15	38.89	-5673.6	34.54	22.53	38.62	-2977.97	44.55	-2047.10	34.49	32.24	30.99	35.28	38.09	41.02	49.92
MIN	27.57	-5673.60	19.32	13.70	25.03	-2977.97	39.44	-2047.10	34.49	28.21	28.35	34.65	38.09	34.59	32.56
MAX	46.53	-513.80	34.54	56.11	43.62	-84.54	51.36	-609.20	42.18	43.84	38.03	46.62	52.56	51.36	49.92
AVERAGE	35.78	-2547.44	25.68	32.98	36.81	-673.31	44.39	-1010.86	37.97	34.79	33.14	39.14	46.41	42.97	40.86
S.D	5.32	1696.22	4.57	13.02	5.74	735.60	4.13	400.63	1.76	6.01	2.94	3.60	4.13	5.51	5.34
CV	0.15	-0.67	0.18	0.39	0.16	-1.09	0.09	-0.40	0.05	0.17	0.09	0.09	0.09	0.13	0.13
CAGR	-0.97	17.36	2.56	-5.45	-0.60	26.80	-0.86	8.42	-0.49	-1.78	-0.12	-0.18	-1.90	1.14	1.14
AAGR	-0.16	19.41	4.10	-1.10	0.03	33.04	-0.62	9.60	-0.25	-1.47	0.58	0.01	-1.63	1.57	1.66