

A Comparative Study of Profitability Analysis of Selected Listed Pharmaceutical Companies with Special Reference to Top 5 Pharma Companies in India

Rohan Jha

Former Post Graduate Student, Department of Commerce University of Calcutta, India

Corresponding Author: vatsrohan2096@gmail.com

Received: 01-08-2023

Revised: 16-08-2023

Accepted: 31-08-2023

ABSTRACT

Profitability refers to the profits or gains a business makes in relation to its expenses. It helps to determine the future strategies of business, whether to invest or not and the performance of the business by analysing the current financial position of the venture or firm. In this paper an attempt to assess the profitability position of selected pharma companies (on the basis of market capitalization). The annual report of last 5 years i.e. from 2018-19 to 2022-23 were analysed to know the position of pharma companies in terms of profitability. By analysing annual reports, it is found that among the selected pharma companies Sunpharma and Torrent Pharmaceutical are secured the top position (based on mean and C.V.) and in both based on mean and C.V. Cipla held the last position.

Keywords: profitability pharmaceutical companies, market capitalization, gross profit ratio, net profit ratio

I. INTRODUCTION

Financial performance analysis is the process of determining the operating and financial characteristics of a firm from accounting and financial statements. It is the process of determining a company's financial strengths and weaknesses by correctly defining the relationship between balance sheet and profit and loss accounts components. Every business, whether large and small needs finance to carry on its operation. Managing of finance is an important activity which involves both short term and long term planning. The goal of any enterprise is profit maximisation. Profitability analysis is the process of calculating or analyzing the profits of a business. With the help of profitability analysis, it helps businesses identify their revenue streams and where they can reduce their expenses to generate maximum gains. An analysis of the profitability reveals as to how the position of profit stands as a result of total transactions made during the year. Profitability of a business firm is very much helpful to the management, creditors and shareholders of a business firm. Profit is a strong indicator of company's overall performance. The Study on financial performance of the company is by using ratio analysis, trend analysis and comparative statements to assess the profitability position of the selected pharma companies in India.

II. LITERATURE REVIEW

Priyanka Jha (2018) in their study "**financial Performance of public sector and private sector banks in India**" they examine the financial performance of selected public and private sector banks i.e, **PNB and ICICI banks** and in their study they concludes that ICICI bank performed better in comparison of PNB.

Dr. B. Sudha and P. Rajendran (2019) in their study they made an attempt to analyze the financial performance of HDFC bank, with the help of ratio analysis during the period of 2015 to 2019 and in their study they concludes that performance of HDFC bank is satisfactory.

Rana (2019) in their study they made an attempt to examined the financial statement of Tata Motors & Maruti Suzuki using ratio analysis during the period of 2013-14 to 2017-18 and they found that both company performance is satisfactory.

III. STATEMENT OF THE PROBLEM

In the present study, the performance analysis of pharmaceutical industries on the subject of profitability ratio during the period of 2018-19 to 2022-23 which has not been undertaken in the earlier studies.

IV. OBJECTIVES OF THE STUDY

- To study the financial performance of the pharmaceutical companies using profitability ratio.
- To find out the variance among the mean value of ratio in pharma companies.
- To find out the association between various profitability ratios.

V. RESEARCH METHODOLOGY AND DATA BASE

The present study is mainly focussed to analyze the financial performance of pharmaceutical companies in India. In this present study, five pharma companies were selected on the basis of market capitalisation during the period starting from 2018-19 to 2022-23. The present study is focussed on the analysis of financial performance using profitability ratios. The techniques used for the present study is ratio analysis and various statistical tools such as mean, s.d, c.v and anova. The present study is purely based on secondary data. The annual reports of the companies, various journals and websites were analyzed for this study.

VI. ANALYSIS AND DISCUSSION

The following are the top 5 pharma companies in India on the basis of market capitalisation.

Table 1: Top 5 Pharma Companies in India

		\$
1.	Sun Pharmaceutical Industries Ltd.	28738 million
2.	Dr. Reddy's Laboratories Ltd.	9355 million
3.	Cipla Limited	8855 million
4.	Torrent Pharmaceutical	6338 million
5.	Zydus Life Science Ltd.	6062 million

Source: Global Data.in
 As on 31st March 2023

VII. COMPANY PROFILE

1. Sun Pharmaceutical Industries Ltd.

It is an Indian multinational pharmaceutical company. It's headquarter is situated in Mumbai. Sunpharma is mainly focussed on manufacturers and sells pharmaceutical formulations and active pharmaceutical ingredients in more than 100 countries across the globe. It's active pharmaceutical products include baricitinib, brivaracetam and dafaglifozin. The 2014 acquisition of Ranbaxy made Sun Pharma the largest pharma company in India, the largest Indian pharma company in the US and the 4th largest specialty generic company globally. In the United States, the company markets a large basket of generics, with a strong pipeline awaiting approval from the US Food and Drug Administration. Over 72% of Sunpharma sales are from markets outside India, primarily in the United States. Manufacturing is across 44 global locations in India, the United States, Asia, Africa, Australia and Europe.

Details of Profitability ratios of Sunpharma Limited (Rs. in cr)

Year	Net Sales	Gross Profit	Operating Profit	Net Profit	Capital Employed	Total assets	Shareholders fund	GPR	OPR	NPR	ROA	Return On Net Worth
2023	43885.68	33223.52	9243.46	8473.58	60836.59	80743.59	59315.47	75.70	21.06	19.30	0.10	14.28
2022	38654.49	27778.35	8147.17	3272.73	52599.32	69799.87	51066.11	71.86	21.07	8.46	0.04	6.40
2021	33498.14	24279.62	6427.62	2903.82	51521.1	67666.73	49479.83	72.48	19.18	8.66	0.04	5.86
2020	32837.50	22366.23	4768.84	3764.93	52546.03	68252.46	45264.45	68.11	14.52	11.46	0.05	8.31
2019	29065.91	19827.15	3687.70	2665.42	47354.19	64693.81	41409.06	68.21	12.68	9.17	0.04	6.43
							Mean	71.272	17.702	11.41	0.054	8.256
							S.D	3.193	3.877	4.569	0.026	3.493
							C.V	4.480	21.901	37.414	48.148	42.308

Source: Investing. Com

2. Dr. Reddy's Laboratories

Dr.Reddy's Laboratories is an Indian multinational pharmaceutical company based in Hyderabad. Dr. Reddy's manufactures and markets a wide range of pharmaceuticals in India and overseas. Dr. Reddy's originally launched in 1984 producing active pharmaceutical ingredients. In 1986, Reddy's started operations on branded formulation, within a year Reddy's had launched Norliet, the company's first recognised brand in India. In 1999, after acquiring American Remedies Ltd., the acquisition made Reddy's the third largest company in India, after Ranbaxy and Glaxo (1) ltd. By 2007, Dr Reddy's

had seven FDA plants producing active pharmaceutical ingredients in India and seven FDA inspected and ISO 9001 (quality) and ISO 14001 (environmental management) certified plants making patient ready medications- five of them in India and two in the UK. The company has over 190 medications, 60 active pharmaceutical ingredients for drug manufacture diagnostic kits, critical care and biotechnology.

Details of Profitability ratios of Dr. Reddys Laboratories (Rs. in cr)

Year	Net Sales	Gross Profit	Operating Profit	Net Profit	Capital Employed	Total Assets	Shareholders Fund	GPR	OPR	NPR	ROA	Ret. on net worth
2023	24587.9	13934.3	5099.4	4506.7	23600.9	32185.40	23099.10	56.67	20.73	18.32	0.14	19.51
2022	21439.1	11384	3591.9	2356.8	19881.2	29282.70	19052.70	53.09	16.75	10.99	0.08	12.36
2021	18972.2	10307.7	3297	1723.8	18210	26549.10	17306.20	54.33	17.37	9.08	0.06	9.96
2020	17460	9400.9	2931.3	1949.8	16011.2	23225.30	15598.80	53.84	16.78	11.16	0.08	12.49
2019	15448.2	10468.6	2043.4	1950	16568.3	22465.60	14023.60	67.76	13.22	12.62	0.08	13.90
Mean								57.138	16.97	12.434	0.088	13.644
S.D								6.095	2.666	3.522	0.030	3.571
C.V								10.667	15.710	28.325	34.090	26.172

Source: Investing.Com

3. Cipla

Cipla is an Indian multinational pharmaceutical company headquartered in Mumbai. Cipla primarily develops medicines to treat respiratory disease, cardiovascular disease, arthritis, diabetes, depression and many other medical conditions. Cipla is the third largest drug producer in India. Cipla sells active pharmaceutical ingredients to others manufacturers as well as pharmaceutical and personal care products. They are the world's largest manufacturer of antiretroviral drugs. Cipla sells its products in 86 countries across the globe.

Details of Profitability ratios of Cipla Limited (Rs. in cr)

Year	Net Sales	Gross Profit	Operating Profit	Net Profit	Capital Employed	Total Assets	Shareholders Fund	GPR	OPR	NPR	ROA	Ret.on Net worth
2023	22753.12	14500.84	3854.86	2801.91	24353.61	29463.28	23713.54	63.73	16.94	12.31	0.09	11.81
2022	21707.84	13017.63	3562.70	2516.75	22187.91	27101.12	21117.38	59.96	16.41	11.59	0.09	11.91
2021	19120.53	11614.16	3249.31	2404.87	20560.34	25151.89	18585.59	60.74	16.99	12.57	0.09	12.93
2020	17131.99	10195.18	2040.80	1546.52	19269.42	23662.56	15763	59.50	11.91	9.02	0.06	9.81
2019	16362.41	9666.3	1777.12	1527.70	20191.81	23963.32	15012.28	59.07	10.86	9.33	0.06	10.17
Mean								60.6	14.622	10.964	0.078	11.326
S.D.								1.855	2.986	1.675	0.016	1.302
C.V.								3.06	20.421	15.277	20.512	11.495

Source: Investing.com

4. Torrent Pharmaceuticals Ltd.

Torrent Pharmaceuticals Ltd. is an Indian multinational pharmaceutical company, owned by Torrent group and its headquartered in Ahmedabad. Torrent pharma is active in the therapeutic area of cardiovascular, central nervous system, gastro intestinal, diabetology, anti-infective and pain management segments. Its operates in more than 40 countries across the globe.

Details of Profitability ratios of Torrent Pharmaceuticals Private Limited (Rs. in cr)

Year	Net Sales	Gross Profit	Operating Profit	Net Profit	Capital Employed	Total Assets	Shareholder Fund	GPR	OPR	NPR	ROA	Ret. On net worth
2023	9620	6885	2842	1245	9565	15012	6198	71.56	29.54	12.94	0.08	20.08
2022	8508.04	6065	2431	777.2	8684.75	13099.84	5952.95	71.28	28.57	9.13	0.05	13.05
2021	8004.83	5858	2537	1252	9183.03	14074.65	5837.17	73.18	31.69	15.64	0.08	21.44
2020	7939.31	5772	2284	1025	8555.58	14009.74	4823.22	72.70	28.76	12.91	0.07	21.25
2019	7673	5453	2025	436	8955.6	14120.92	4724.35	71.06	26.39	5.68	0.03	9.22
Mean								71.956	28.99	11.26	0.062	17.008
S.D.								0.930	1.909	3.886	0.021	5.554
C.V								1.292	6.585	34.51	33.87	32.652

Source: Investing.com

5. Zydus Life Science Limited

Zydus Life Science Limited is formerly known as Cadilla health care Limited. In 2022 it is renamed and known as Zydus Life Science Limited. Zydus Life Science Limited is primarily engaged in the manufacturing of generic drugs. It's headquarter is situated in Ahmedabad, Gujarat India. The company makes active pharmaceutical ingredients at four sites in India i.e., Anklshwar, Vadodara and Ahmedabad plant. It is also among the several Indian pharma companies that received the licensing agreements from the Gilead sciences to produce remdesivir (famous for treat to coronavirus disease). In 2020 the company ranked 100th in the Fortune India 500.

Details of Profitability Ratios of Zydus Life Sciences Limited (Rs. in cr)

Year	Net Sales	Gross Prof.	Operating Profit	Net Profit	Capital Employed	Total Assets	Share holder Fund	GPR	OPR	NPR	ROA	Ret on net worth	
2323	17237.4	10927.3	2852.8	1960.3	20225.7	25756.4	19688.3	63.39	16.55	11.37	0.07	9.95	
2022	15265.2	9579.5	2629.4	4487.3	19956	27795.4	19053.8	62.75	17.22	29.39	0.16	23.55	
2021	14403.5	9460.1	2735.6	2133.6	16023.4	23884.7	14929.6	65.67	18.99	14.81	0.08	14.29	
2020	14253.1	8745.2	1738	1176.6	15417.2	23686.6	10376	61.35	12.19	8.25	0.04	11.33	
2019	13165.6	7860.6	2382.2	1848.8	16140.6	23483.1	10386.3	59.70	18.09	14.04	0.07	17.80	
								Mean	62.572	16.608	15.572	0.084	15.384
								S.D.	2.238	2.634	8.141	0.045	5.469
								C.V	3.576	15.859	52.279	53.571	35.549

Source: Investing.com

Table 2: Ranking of Pharmaceutical Companies based on Profitability ratios

Company Name	Based on Mean							Company Name	Based on C.V.						
	GPR	OPR	NPR	ROA	RONW	Total Sc. Of Rank	Ranks based on total Score		GP R	OP R	NP R	RO A	RON W	Total Score of Rank s	Rank s based on total score
Sun Pharmaceutical Industries	2	2	3	5	5	17	4	Sun Pharmaceutic al Industries	2	1	2	2	1	8	1
Dr. Reddys Laboratories	5	3	2	1	3	14	3	Dr. Reddys Laboratories	1	4	4	3	4	16	3
Cipla	4	5	5	3	4	21	5	Cipla	4	2	5	5	5	21	5
Torrent Pharmaceuticals Pvt. Ltd.	1	1	4	4	1	11	1	Torrent Pharmaceutic als Pvt. Ltd	5	5	3	4	3	20	4
Zydus Life Science Pvt. Ltd.	3	4	1	2	2	13	2	Zydus Life Science Pvt. Ltd.	3	3	1	1	2	10	2

Based on Mean Value Ranking

Torrent Pharmaceuticals Ltd. are the top performer followed by Zydus life sciences pvt.ltd, Dr. Reddy's laboratories, Sunpharmaceuticals ltd. and Cipla secured the last position based on their mean value.

Based on C.V. Ranking

Sun Pharmaceuticals ltd are the secured the top position followed by Zydus Life Sciences pvt.ltd ,Dr. Reddy's Laboratories, Torrent pharmaceuticals ltd. and Cipla based on their C.V. value.

Regression Analysis

To identify the association between different variables of profitability indicators correlation techniques have been used

VIII. HYPOTHESIS FORMULATION

Null Hypothesis

There is no significant difference between profitability of selected pharmaceutical industries in India.

Alternative Hypothesis: There is significant difference between profitability of selected pharmaceutical industries in India.

Table 3: One way Anova of Gross Profit Ratio

	Summary sum of Square	d.f	MS	F ratio	Sig value
Between within	872.62 226.6592	(5-1)=4 (25-5)=20	218.1555 11.3329	19.249	2.87
Total	1099.2792	24			

From table no. 8, we can found that the F_{cal} value is greater than the F_{tab} value, at 5% level of d.f. being $v_1=4$ and $v_2=20$, there is significant difference between profitability of selected pharmaceutical companies.

Table 4: One way Anova of Net Profit Ratio

	Summary Sum of Square	d.f	MS	F ratio	Sig. Valu
Between within	71.891 469.934	(5-1)=4 (25-5)=20	17.972 23.496	0.764	2.87
Total	541.825	24			

From the above table, as F_{cal} value is less than the F_{tab} value at 5% level of d.f. being $N_1=4$ and $v_2=20$, the analysis supports that there is no significant difference between profitability of selected pharmaceutical companies in India.

Table 5: One way Anova of Operating Profit ratio

	Summary of square	d.f	MS	F ratio	Sig. value
Between Within	652.457 166.6188	(5-1)=4 (25-5)=20	163.114 8.330	19.581	2.87
Total	819.0758	24			

As per the above table, we can found that the analysis supports that there is significant association between operating profit of selected pharmaceutical companies in India, as $F_{cal} > F_{tab}$.

Table 6: One way Anova of Return on Assets ratio

	Summary sum of square	d.f	MS	F ratio	Sig. value
Between within	0.0200508 0.01748	(5-1)=4 (25-5)=20	0.005127 0.000874	5.866	2.87
Total	0.037988	24			

From the above table, it can be found that there is significant association between ROA of selected pharmaceutical companies in India as $F_{cal} > F_{tab}$.

Table 7: One way Anova of Return on Net Worth Ratio

	Summary sum of square	d.f	MS	F ratio	Sig. value
Between within	492.965 349.6819	(5-1)=4 (25-5)=20	123.241 17.484	7.048	2.87
Total	842.6469	24			

From the above table, it can be observed that Return on net worth of selected pharmaceutical companies in India is significantly associated as $F_{cal}(7.0480) > F_{tab}(2.80)$

IX. CONCLUSION

The purpose of this study was to analyze the profitability position of top 5 pharmaceutical companies in India. To know about the profitability position of selected pharma companies, firstly analyze the profitability ratios and with the help of anova, it is try to find out that if any association is found between the profitability ratios. According to findings of the study, the study conclude that the Sun Pharma (on the basis of C.V) and Torrent Pharmaceuticals (on the basis of mean) are secured top position and Cipla (both on the basis of mean and C.V) secured the last position. The study also concluded that, except net profit ratio, there is an association between remaining ratio.

REFERENCES

1. Jha, P. (2018). Analyzing financial performance of public sector banks and privatesector banks in India. *ICTACT Journal of Management Studies*, 4(3), 793-799.
2. Rajendran, P., & Dr. B. Sudha. (2019). A study on financial analysis and performance of HDFC bank. *Journal for the Study and Research*, 11(11), 37-44.
3. Rana, S. (2019). Financial analysis of tata motors and maruti Suzuki. *Research Review International Journal of Multi Disciplinary*, 4(3).
4. <https://www.sunpharma.com>.
5. <https://www.drreddys.com>.
6. <https://www.cipla.com>.
7. <https://www.torrentpharma.com>.
8. <http://www.zyduslife.com>.