

## **A Financial Performance Analysis On Pharmaceutical Companies With Reference To Nse**

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### **ABSTRACT**

The pharmaceutical industry plays a critical role in ensuring public health while also contributing significantly to economic growth and employment in India. As one of the core sectors listed on the National Stock Exchange (NSE), the financial health of pharmaceutical companies is vital not only for stakeholders but also for long-term national development. This study, titled "A Financial Performance Analysis on Pharmaceutical Companies with Reference to NSE," provides a comprehensive evaluation of selected leading pharma companies — Cipla, Sun Pharma, and Dr. Reddy's — through detailed financial ratio analysis, correlation assessment, and factor analysis. The research spans five financial years (2019–2024) and assesses key performance indicators such as liquidity, profitability, earnings retention, and valuation metrics. The study applies analytical techniques including Kaiser-Meyer-Olkin (KMO) testing, Bartlett's test, and factor loading to determine the most influential financial variables driving performance. The findings reveal that while Dr. Reddy's consistently shows strong profitability and dividend distribution, Sun Pharma exhibits a comparatively weaker liquidity position. Cipla, on the other hand, maintains stable financial metrics with notable improvements in quick and current ratios. The results also show declining enterprise values and profit margins across all firms, suggesting the need for strategic financial restructuring. The research emphasizes the importance of liquidity optimization, inventory efficiency, and balanced reinvestment strategies to enhance financial resilience. The outcomes of this study will be valuable for corporate managers, investors, analysts, and policymakers seeking insights into the financial appraisal and long-term sustainability of India's pharmaceutical sector.

**Keywords:** Financial Performance Analysis, Pharmaceutical Sector and NSE Listed Companies.

### **INTRODUCTION**

The foundation of pay for is as out of date as real human lifestyle on the planet. The term financing was formerly a French phrase. In the eighteenth century, simply English speaking communities to suggest the management of cash had followed it. Organization concern demands financing to meet up with their necessity in the financial world. Any type of business activity depends upon the finance. Consequently, it really is known as lifeblood of organization bank. If the business matter is definitely small or big, they want solutions to satisfy the business actions.

Finance may be the soul of your financial actions. To execute virtually any economic activity, we need specific resources, which usually should be put with regards to cash. Finance can be a must for

obtaining physical assets, which are had a need to perform useful actions and carrying business functions such as product sales, pay out actions, reserve to get contingencies and so forth.

Finance is certainly only a great exchange of obtainable means. Finance may be the lifeblood of a commercial enterprise. It's the master vital, which gives around to the whole source internet marketing used in production and retailing actions. Helpful management of each bank is normally closely associated with efficient administration of it has the financing. A barter trading program is likewise a kind of financing options. Finance can be an art of managing different available assets like cash, possessions, money, securities, and so forth

A summary way of measuring just how well a bank may use monetary assets from its major setting of business and generate revenues. This term can be utilized as standard way of measuring a bank's total financial wellness over a granted time period and can be utilized to compare equivalent companies over the same market or even to do a comparison of sectors or perhaps sectors found in aggregation. Thus the study is to compare the performance of selected companies in pharmaceutical industry.

### **STATEMENT OF PROBLEM**

In the fast changing economic scenario world over, the management of any bank has to play a dynamic role in managing its finances. To make rational decisions in tune with the objectives of the firm, the management must analyze the fund's needs, the financial status and profitability and the business risk of the bank (Van Horne 2000).

As there is an increasing competition from other global players, the management has to initiate appropriate steps to lower the cost of production and generation of additional revenues through cost competitiveness. For this purpose, certain production areas have been identified for cost reduction. The management can aim at increasing the profit through the following methods:

In the light of the above, proper analysis of the financial statements of the bank is necessary to assess the financial health of the bank, as it provides valuable insights into its financial performance. Financial appraisal provides a method for accessing the financial strengths and weakness of a bank. There are two views of the financial strength of every organization based on the period of lending i.e., the short term and long term. Short term financial strength relates to the technical solvency of an organization in the near future, while the long term financial strength depends on the structure that has been imposed in financing more permanent asset requirements.

To analyze the financial strength of Pharma we chose the topic of research study as "Financial appraisal of Pharma sector in India analyzed the financial performance of selected pharma companies namely Cipla, Sun pharma and Dr.Reddy.

### **OBJECTIVES OF THE STUDY**

- To examine the solvency, liquidity, profitability, valuation, retention position of the companies taken for the study based on the ratios.
- To analyze the correlation between the short term positions of the companies taken for the study.
- To find out the importance among the ratios to give priority in making decisions in future period of time.

### **SCOPE OF THE STUDY**

- The study will be helpful in understanding the pattern and the structure of financial variables of selected bank apart from identifying the financial relationship with other major pharma companies in India.
- The study will be helpful in checking current performance against predetermined standards contained in the plans and will be helpful in evaluation of standards.
- The study will be helpful in forming the policies of the management within the scheduled time and approve cost.
- The study will be helpful in ensuring maximum economy in expenditure.

### **RESEARCH METHODOLOGY**

**Research design**

The design of the study is analytical. It is the procedure of condition and analysis of data in a manner that aims to combine reference to the research purpose. The research is conducted within the conceptual structure.

**Data collection**

The data collected from centre for monitoring Indian economy. Secondary data used in this study. The other relevant data were collected from Journals, Magazines, Websites and Dailes.

**Period of the study**

The period for this study covered ten years from 2019 to 2024 and the essential data for this period have been collected. The financial year starts from 1st April to 31st March every year.

**Sample size and design****Companies taken for the study**

A total of 3 companies were taken for the study towards comparison. The companies are Cipla, Sun pharma and Dr.Reddy.

**Framework of analysis**

Financial ratios provide a quick and relatively simple means of examining the financial condition of a business. Ratios can be very helpful when comparing the financial health of different businesses. The financial performance of Pharma industries can be measured by a number of indicators.

In this study, the predictive variables are the financial ratios of Pharma are Basic EPS, Book Value, Dividend / Share, Revenue from Operations/Share, PBDIT/Share, PBIT/Share, PBT/Share, PBT/Share, PBDIT Margin, PBIT Margin, PBT Margin, Net Profit Margin, Return on Networth / Equity, Return on Capital Employed, Return on Assets, Total Debt/Equity, Asset Turnover Ratio, Current Ratio, Quick ratio, Inventory Turnover Ratio, Dividend Payout Ratio, Earnings Retention Ratio, Cash Earnings Retention Ratio, Enterprise Value, EV/Net Operating Revenue, EV/EBITDA, Market Cap/Net Operating Revenue, Retention Ratios, Price/BV, Price/Net Operating Revenue and Earnings Yield

**STATISTICAL ANALYSIS**

In order to identify the prominent factors responsible for the profitability of Pharma industries and also to measure the extent of influence of the independent variables on the dependent variable, the following tools were applied by the researcher:

1. Factor Analysis
2. Correlation

**LIMITATIONS OF THE STUDY**

Some of the unavoidable limitations of the present work are as follows:

1. Financial information collected for the present study is secondary in nature. In such a case, the study carries all the limitations inherent with the secondary data and financial information.
2. The study is restricted to 3 companies out of 48 companies operating in the Pharma.
3. While computing the data for the purpose of analysis, the approximation of decimal places leads to minor variations in ratios as well as percentage analysis and hence these are bound to exist in the present study.

**ANALYSIS AND INTERPRETATION****RATIOS RELATED TO PHARMACEUTICAL COMPANIES****FACTOR ANALYSIS BASED ON FACTOR REDEMPTION METHOD****KMO and Bartlett's Test for ratios related to pharmaceutical companies**

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.674
Bartlett's Test of Sphericity	Approx. Chi-Square	156.998
	df	26
	Sig.	.000

KMO of sampling adequacy value for the adaptability scale for ratios related to pharmaceutical companies is 0.674 and it indicates that the sample is adequate to consider the data as normally distributed.

#### Total Variance Explained for ratios related to pharmaceutical companies

Total Variance Explained									
Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	19.997	64.506	64.506	19.997	64.506	64.506	12.083	38.978	38.978
2	7.336	23.665	88.171	7.336	23.665	88.171	10.272	33.136	72.114
3	2.077	6.699	94.870	2.077	6.699	94.870	6.293	20.299	92.413
4	1.590	5.130	100.000	1.590	5.130	100.000	2.352	7.587	100.000
5	3.821	1.232	100.000						
6	1.207	3.893	100.000						
7	5.937	1.915	100.000						
8	5.059	1.632	100.000						
9	4.909	1.584	100.000						
10	4.529	1.461	100.000						
11	3.949	1.274	100.000						
12	3.121	1.007	100.000						
13	2.402	7.748	100.000						
14	1.877	6.053	100.000						
15	1.678	5.414	100.000						
16	1.324	4.272	100.000						
17	9.873	3.185	100.000						
18	6.447	2.080	100.000						
19	-1.240	-4.001	100.000						
20	-3.880	-1.252	100.000						
21	-8.391	-2.707	100.000						
22	-1.073	-3.462	100.000						
23	-1.416	-4.568	100.000						
24	-1.458	-4.703	100.000						
25	-2.455	-7.921	100.000						
26	-2.795	-9.015	100.000						
27	-3.050	-9.837	100.000						
28	-3.520	-1.136	100.000						

29	-4.498	-1.451	100.000					
30	-4.913	-1.585	100.000					
31	-1.234	-3.981	100.000					

Out of 31 components eigen value above 1.0 will taken in to consideration for factor rotation were the 4 components were considered to be valid. The first component contributes 64.50%, second component contributes 23.66%, third component contributes 6.69% and forth component contributes 5.13%.

#### Rotated Component Matrix for ratios related to Pharmaceutical companies

Ratios	Component			
	1	2	3	4
Basic EPS	.458	.841	.286	.028
Book Value	.807	.589	-.006	.047
Dividend / Share	.179	.902	.251	.304
Revenue from Operations/Share	.807	.526	.219	.158
PBDIT/Share	.554	.729	.368	.161
PBIT/Share	.486	.741	.422	.191
PBT/Share	.558	.757	.337	.047
PBT/Share	.455	.844	.285	.021
PBDIT Margin	.831	.521	-.096	.166
PBIT Margin	.813	.547	-.043	.194
PBT Margin	.675	.735	.009	-.063
Net Profit Margin	.634	.769	.020	-.084
Return on Networth / Equity	.216	.923	.308	.080
Return on Capital Employed	.827	.464	-.099	-.300
Return on Assets	.433	.864	.255	.018
Total Debt/Equity	-.822	-.520	-.057	.224
Asset Turnover Ratio	.148	.254	.933	.208
Current Ratio	.972	.111	.177	.107
Quick ratio	.963	.069	.205	.162
Inventory Turnover Ratio	-.224	.154	.925	.264
Dividend Payout Ratio	.175	-.201	-.946	.183
Earnings Retention Ratio	-.062	.235	.962	.122
Cash Earnings Retention Ratio	.025	.082	.482	.872
Enterprise Value	-.783	-.435	.443	.042
EV/Net Operating Revenue	-.870	-.393	.293	-.049
EV/EBITDA	-.126	-.167	-.055	-.976
Market Cap/Net Operating Revenue	-.867	-.385	.313	-.053
Price/BV	-.062	.235	.962	.122
Price/Net Operating Revenue	-.867	-.385	.313	-.053
Earnings Yield	.402	.911	.050	.077

The ratios Book Value of the pharma companies taken for the study (0.807), PBDIT Margin (0.831), PBIT Margin (0.813), Return on Capital Employed (0.827), Current Ratio (0.972), Quick ratio (0.963) can be given 64.50% importance. The ratios Basic EPS (0.841), Dividend / Share (0.902), PBDIT/Share

(0.729), PBIT/Share (0.741), PBT/Share (0.757), PBT/Share (0.844), PBT Margin (0.735), Net Profit Margin (0.769), Return on Networth / Equity (0.923), Return on Assets (0.864), Earnings Yield (0.911) can be given 23.66% importance. The ratios Asset Turnover Ratio (0.933), Inventory Turnover Ratio (0.925), Earnings Retention Ratio (0.962) and Retention Ratios (0.962) can be given 6.69% importance. The ratio Cash Earnings Retention Ratio (0.872) can be given 5.13% importance.

#### Liquidity of the Pharma companies taken for the study

Liquidity ratio	Year	Cipla	Sun pharma	Dr.Reddy
Current Ratio	2019-2020	2.19	0.6	2.1
	2020-2021	2.48	0.58	2.02
	2021-2022	2.91	0.76	1.91
	2022-2023	4	0.84	2.9
	2023-2024	3.45	1.07	2.42
Quick Ratio	2019-2020	1.2	0.36	1.75
	2020-2021	1.44	0.37	1.59
	2021-2022	1.79	0.59	1.52
	2022-2023	2.79	0.63	2.25
	2023-2024	2.29	0.83	1.89
Inventory Turnover Ratio	2019-2020	4.15	3.57	6.01
	2020-2021	4.06	3.33	5.37
	2021-2022	3.75	4.22	5.04
	2022-2023	4.31	3.69	5.27
	2023-2024	4.19	4.76	5.41

Cipla has demonstrated strong and improving liquidity over the years, indicating a well-balanced working capital strategy and robust asset-liability management.

Dr. Reddy's maintains moderately high liquidity and efficient inventory management, suggesting financial stability.

Sun Pharma, despite recent improvements, still lags in liquidity metrics, particularly the quick ratio, which suggests a need for better short-term asset optimization and liability control.

#### EARNINGS

##### Dividend / Share

Dividend / Share	Cipla	Sun pharma	Dr.Reddy
2019-2020	2	1	20
2020-2021	2	3.5	20
2021-2022	3	2	20
2022-2023	3	2.75	20
2023-2024	4	4	25

The above table shows about Dividend / Share of pharma companies taken for the study. The dividend per share of Cipla was increasing from 2 to 4 and was increasing from 1 to 4 with Sun pharma and it was increasing from 20 to 25 with Dr.Reddy. It reveals that Dr.Reddy was giving more dividend when compared to other companies taken for the study.

##### Return on Networth / Equity

Return on Networth / Equity	Cipla	Sun pharma	Dr.Reddy
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2019-2020	12.2	-4.99	11.67
2020-2021	7.61	-0.1	11.93
2021-2022	10.4	1.36	4.8
2022-2023	11.96	3.57	10.07
2023-2024	13.32	13.16	19.33

### Interpretation

The above table shows about return on net worth to equity of pharma companies taken for the study. The net profit margin of Cipla was increasing from 12.2 to 13.32 and was increasing from -4.99 to 13.16 with Sun pharma and it was increasing from 11.67 to 19.33 with Dr.Reddy. It reveals that return on net worth to equity of all the companies and remedy measures has been taken for increasing the profit leading to increase in credibility of the company.

### PROFITABILITY RATIOS

#### Asset Turnover Ratio

Asset Turnover Ratio	Cipla	Sun pharma	Dr.Reddy
2019-2020	79.51	22.27	58.13
2020-2021	68.99	22.68	59.09
2021-2022	66.62	24.47	54.73
2022-2023	67.18	27.31	65.39
2023-2024	62.03	32.62	60.84

The above table shows about asset turnover ratio of pharma companies taken for the study. The asset turnover ratio of Cipla was decreasing from 79.51 to 62.03 and was increasing from 22.27 to 32.62 with Sun pharma and it was increasing from 58.13 to 60.84 with Dr.Reddy. It reveals that asset turnover ratio of Cipla was decreasing in the last five years and for the same the company has to increase their profit and sales in near future.

#### Earnings Retention Ratio

Earnings Retention Ratio	Cipla	Sun pharma	Dr.Reddy
2019-2020	87.63	122.42	74.87
2020-2021	83.5	115.76	75.78
2021-2022	89.05	-161	29.59
2022-2023	87.21	41.33	74.01
2023-2024	75.66	57.06	86.68

The above table shows about earnings retention ratio of pharma companies taken for the study. The dividend payout ratio of Cipla was decreasing from 87.63 to 75.66 and was decreasing from 122.42 to 57.06 with Sun pharma and it was increasing from 74.87 to 86.68 with Dr.Reddy. It reveals that the earnings retention ratio of sun pharma was decreasing drastically when compared to other pharma companies taken for the study.

### RETENTION RATIOS

#### Price/BV

Price/BV	Cipla	Sun pharma	Dr.Reddy
2019-2020	3.43	9.18	4.46
2020-2021	3.72	7.85	3.76

2021-2022	3.1	5.32	2.93
2022-2023	2.7	5.03	3.63
2023-2024	1.96	3.46	3.41

The above table shows about Price/Book value of pharma companies taken for the study. The net profit margin of Cipla was decreasing from 3.43 to 1.96 and was decreasing from 9.18 to 3.46 with Sun pharma and it was decreasing from 4.46 to 3.41 with Dr.Reddy. It reveals that the Price/BV of all the companies were decreasing in the last five years which leads to decrease in credibility of the firms.

### Earnings Yield

Earnings Yield	Cipla	Sun pharma	Dr.Reddy
2019-2020	0.04	-0.01	0.03
2020-2021	0.02	0	0.03
2021-2022	0.03	0	0.02
2022-2023	0.04	0.01	0.03
2023-2024	0.07	0.04	0.06

The above table shows about earnings yield of pharma companies taken for the study. The net profit margin of Cipla was increasing from 0.04 to 0.07 and was increasing from -0.01 to 0.04 with Sun pharma and it was increasing from 0.03 to 0.06 with Dr.Reddy. It reveals that the earnings yield of all the companies were increasing in the last five years which leads to increase in credibility of the firms.

### Comparison of Current ratio of companies taken for the study

		Liquidity ratio of Cipla	Liquidity ratio of Sun pharma	Liquidity ratio of Dr.Reddy
<b>Liquidity ratio of Cipla</b>	Pearson Correlation	1	.757	.853
	Sig. (2-tailed)		.139	.066
	N	5	5	5
<b>Liquidity ratio of Sun pharma</b>	Pearson Correlation	.757	1	.528
	Sig. (2-tailed)	.139		.360
	N	5	5	5
<b>Liquidity ratio of Dr.Reddy</b>	Pearson Correlation	.853	.528	1
	Sig. (2-tailed)	.066	.360	
	N	5	5	5

The above table shows about the relationship between current ratio of all the companies taken for the study. It reveals that high relationship exists between liquidity of Cipla (0.776), Sun pharma (0.943) and Dr.Reddy (0.666 and Sun pharma (0.883), Cipla and Sun pharma (0.757), Cipla and Dr.Reddy (0.853) as the correlation value is greater than 0.7. Moderate relationship exists between Sun pharma and Dr.Reddy (0.528) as the correlation value is between 0.3-0.7.

**Comparison of Quick ratio of companies taken for the study**

		Quick ratio of Cipla	Quick ratio of Sun pharma	Quick ratio of Dr.Reddy
<b>Quick ratio of Cipla</b>	Pearson Correlation	1	.773	.802
	Sig. (2-tailed)		.125	.103
	N	5	5	5
<b>Quick ratio of Sun pharma</b>	Pearson Correlation	.773	1	.427
	Sig. (2-tailed)	.125		.473
	N	5	5	5
<b>Quick ratio of Dr.Reddy</b>	Pearson Correlation	.802	.427	1
	Sig. (2-tailed)	.103	.473	
	N	5	5	5

The above table shows about the relationship between Quick ratio of all the companies taken for the study. It reveals that high relationship exists between Cipla (0.844), Sun pharma (0.742), Dr.Reddy (0.886), high relationship exists between Cipla and Sun pharma (0.773), Dr.Reddy and Cipla (0.802).

Moderate relationship exists between Sun pharma and Dr.Reddy (0.427). Meanwhile no relationship exists between Dr.Reddy (-0.061) as the correlation value is negative.

**Comparison of Inventory turnover ratio of companies taken for the study**

		Inventory Turnover Ratio of Cipla	Inventory Turnover Ratio of Sun pharma	Inventory Turnover Ratio of Dr.Reddy
<b>Inventory Turnover Ratio of Cipla</b>	Pearson Correlation	1	-.148	.435
	Sig. (2-tailed)		.812	.465
	N	5	5	5
<b>Inventory Turnover Ratio of Sun pharma</b>	Pearson Correlation	-.148	1	-.321
	Sig. (2-tailed)	.812		.599
	N	5	5	5
<b>Inventory Turnover Ratio of Dr.Reddy</b>	Pearson Correlation	.435	-.321	1
	Sig. (2-tailed)	.465	.599	
	N	5	5	5

The above table shows about the relationship between inventory turnover ratio of all the companies taken for the study. It reveals that high relationship exists between Cipla (0.828), based on inventory turnover of the companies. Moderate relationship exists between Dr.Reddy (0.679), moderate relationship exists Cipla and Dr.Reddy (0.435). Meanwhile, no relationship exists between Sun pharma (-0.612), Cipla and Sun pharma (-0.148), Sun pharma and Dr.Reddy (-0.321).

## **FINDINGS**

- Cipla demonstrated strong and improving liquidity, with current and quick ratios consistently above ideal benchmarks.
- Sun Pharma showed weak liquidity in earlier years but improved gradually; however, its quick ratio remains below optimal levels.
- Dr. Reddy's maintained moderate to high liquidity throughout the study period.
- Dr. Reddy's consistently had the highest dividend/share and return on net worth, indicating strong profitability and shareholder value creation.
- Cipla showed moderate but stable profitability, while Sun Pharma demonstrated a fluctuating trend with later improvement in returns.
- Dr. Reddy's led in inventory efficiency; Cipla and Sun Pharma saw mild improvements, with Sun Pharma showing the sharpest increase over time.
- Dr. Reddy's had the highest earnings retention ratio growth, while Sun Pharma showed a significant decline, raising concerns about its reinvestment strategy.
- Earnings yield improved across all companies, reflecting better earnings relative to market prices.
- Price-to-Book Value (Price/BV) declined for all companies, indicating either lower investor confidence or improved book value not reflected in stock prices.
- Enterprise Value (EV) metrics showed a downward trend, suggesting reduced market expectations or debt levels.
- Strong correlations were found in current and quick ratios between Cipla and Dr. Reddy, indicating similar liquidity patterns.
- Inventory turnover ratios showed weaker or negative correlations, especially between Sun Pharma and others, reflecting divergent operational strategies.

## **SUGGESTIONS**

- The companies Aarti drugs, Aurobindo Pharma and Sun pharma has to increase their current asset and the companies Cipla and Dr.Reddy has to stabilize their current liability.
- Quick ratio of all the companies were increasing but the companies have to look after the financial stability of the companies in future period of time.
- The companies Cipla and Sun pharma has to look after their inventory which has to be reduced in upcoming financial years which may lead to increase I short term profit of the companies.
- Profit Before Depreciation Interest and Tax margin of companies were decreasing in the last five years and remedy measures has be taken for increasing the profit leading to increase in credibility of the companies.
- Profit Before Tax margin of companies were decreasing and remedy measures has been taken for increasing the profit leading to increase in credibility of the companies.
- Return on net worth to equity of all the companies were increasing but the return on investment based on equity of the companies was decreasing and remedy measures has been taken for increasing the profit leading to increase in credibility of the company.

## **CONCLUSION**

The study is about analyzing the credibility of the top pharma companies listed in NSE. For this purpose top 5 companies were taken for the study and were analysed using ratio analysis, correlation and factor analysis. In conclusion, the analysis of the pharmaceutical companies reveals a mixed picture of their financial health and operational performance. While there are notable strengths, such as Dr. Reddy's impressive growth in basic EPS and book value, there are also areas of concern. All the companies should focus on improving their current ratios to better manage short-term obligations and ensure liquidity. Inventory management is crucial, with Cipla and Sun Pharma needing to reduce inventory

levels to boost short-term profitability. Moreover, careful consideration is required in balancing dividend payouts and reinvestment in the business. Efforts should be made to reverse the declining trends in profitability margins, such as Profit Before Depreciation Interest and Tax (PBDIT) and Profit Before Tax (PBT) margins, as well as Return on Investment (ROI) based on equity. Addressing these issues will not only enhance credibility but also improve the companies' attractiveness to investors. Additionally, understanding the correlations among companies and the importance weights assigned to various financial ratios provides valuable insights for strategic decision-making, which can ultimately drive long-term success and competitiveness in the pharmaceutical industry.

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