



IMPACT OF CSR ON THE FINANCIAL PERFORMANCE OF PHARMACEUTICAL COMPANIES LISTED ON NSE

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Abstract

For many years, a firm's performance measurement has been the subject of discussion for decision-makers such as managers, planners, economists, and academic staff. It is the process of measuring the results of a firm's policies and operations in monetary terms. Financial performance analysis includes the analysis and interpretation of financial statements so that it undertakes a complete diagnosis of the profitability and financial soundness of the business. It is a general measure of a firm's overall financial health over a period. It can be used to compare similar firms across the same companies or to compare companies or sectors in aggregation. Corporate Social Responsibility (CSR) is the company's commitment to responsibly managing its operations' social, environmental, and economic effects in line with public expectations. CSR not only improves the firm's social value and reputation but also improves profitability and performance. In this study, an attempt has been made to analyze the impact of CSR on the financial performance of ten leading pharmaceutical companies of India listed on the National Stock Exchange (NSE). The study is conducted by taking into account the data for five years from 2016-2017 to 2020-2021. The Pharmaceutical companies selected for analysis are Divi's Laboratories, Dr. Reddy's Laboratories, GlaxoSmithKline Pharmaceuticals, Cipla, Torrent Pharmaceuticals, Biocon, Alkem Laboratories, Cadila Healthcare, Lupin, and Aurobindo Pharma. The financial performance of these companies is evaluated, and it was found that the impact of CSR on the profitability of the selected pharmaceutical companies in India during the study period is satisfactory.

Keywords: Corporate Social Responsibility, Financial Performance, Pharmaceutical companies, Ratios.

Introduction

A well-designed and implemented financial management plan is expected to contribute positively to creating a firm's value (Padachi, 2006). The dilemma in financial management is to achieve the desired tradeoff between liquidity, solvency, and profitability (Lazaridis et al., 2007). Management of working capital in terms of liquidity and profitability is essential for a sound financial recital as it directly impacts the company's profitability (Rajesh and Ramana Reddy, 2011). The crucial part of managing working capital is maintaining its liquidity in day-to-day operation to ensure its smooth running and meet its obligation (Eljelly, 2004). The ultimate goal of profitability can be achieved by efficiently using resources and operations. It is concerned with maximizing shareholders' or owners' wealth (Panwala, 2009). It can be attained through financial performance analysis. Financial performance means a firm's overall financial health over a given period (Rafuse, 1996). Financial performance analysis is the process of determining a firm's operating and financial characteristics from accounting and financial statements. The goal of such analysis is to determine the efficiency and performance of a firm's management, as reflected in the financial records and reports. Financial performance analysis is an appraisal of the feasibility and solidity of a business (Altman and Eberhart, 1994). Financial performance is a subjective measure of how well a firm can use assets from its primary business model and generate revenues. This term is also a general measure of a firm's overall financial health over a given period. It can be used to compare similar firms across the same industry or industries or sectors in aggregation. There are many different ways to measure financial performance, but all measures should be taken in aggregation.

Corporate Social Responsibility (CSR) is the company's commitment to responsibly managing its operations' social, environmental, and economic effects in line with public expectations. CSR not only improves the firm's social value and reputation but also improves profitability and performance. In India, with the enactment of the



Companies Act, 2013 by the Ministry of Corporate Affairs, Government of India, it has now become mandatory for Companies to take up CSR projects on social welfare activities. India is the only country that has regulated and mandated CSR activities to be undertaken by certain companies. Currently, the ambit of CSR activities has grown manifold and is playing an important part in achieving the sustainable development goals and private-public partnership in nation-building. CSR has also played a vital role in supporting the social and economic development of the country during the COVID-19 pandemic. Section 135 of The Companies Act, 2013 has made it mandatory for companies fulfilling certain criteria, to implement and report CSR policies. Rules framed thereunder and Notifications issued from time to time has provided extensive guidelines on the activities to be undertaken by the companies and the reporting of the same in the Annual Report of the Company. The study attempts to measure the impact of CSR on financial performance of top 10 pharmaceutical companies listed on NSE.

Indian pharmaceutical industry has played a key role in promoting and sustaining development in the vital field of medicines. International companies associated with this sector have stimulated, assisted and spearheaded this dynamic development in the past 73 years and helped to put India on the pharmaceutical map of the world. The public sector has been the backbone of the Indian economy, as it has acted as a strategic partner in the nation's economic growth and development. Public sector enterprises possess strong prospects for growth because they harness new business opportunities, and at the same time expanding the scope of their current business. Financial analysts often assess firm's production and productivity performance, profitability performance, liquidity performance, working capital performance, fixed assets performance, fund flow performance and social performance. The financial performance analysis identifies the financial strengths and weaknesses of the firm by properly establishing relationships between the items of the balance sheet and profit and loss account. Similarly, corporate social responsibility significantly affects the firm's financial performance by developing a positive image among the stakeholders and decreasing overall costs. This study will help management of organizations to realize the importance of corporate social responsibility. In this context researcher has undertaken an analysis of impact of CSR on financial performance of top 10 pharmaceutical companies listed on NSE.

Review of Literature

Tomas Frederiksen (2018) in the study "Corporate social responsibility, risk and development in the mining industry" examined how metals mining companies understand and act upon CSR as risk management and the consequences for community CSR projects. The study focused on CSR as risk management can illuminate the poor development outcomes of community CSR projects, despite recent rises in spending. 'CSR as risk management' introduced immanent limitations including treating CSR as PR, targeting those that pose the greatest threat rather than those with the greatest need, excessively simplifying complex processes and focusing on maintaining the status quo. In risk management thinking, CSR activities may be a high organizational priority, integrated into central decision-making processes and subject to a great deal of investment, but still see little progress towards inclusive development for those living closest to mining operations. **Malik M. et al. (2018)**, in the study "Peer pressure, CSR spending, and long-term financial performance" investigates the role of peer pressure on banks' Corporate Social Responsibility (CSR) activities and the long-term impacts of their CSR spending on financial performance. It was found that a bank's CSR expenditure increases with that of its peer-banks. However, there is no association between a bank's CSR expenditure and that of banks of its non-peer group. The results were robust to addressing the sample selection and bank-specific omitted variable bias, alternative definition of peer pressure, and addressing the concern of alternative explanation that CSR expenditure is driven by tax incentive. Additional analysis suggests that a bank's CSR spending increases not only the current profitability but also its future profitability. This study establishes the evidence of the peer pressure on CSR spending, and the value of CSR in terms of short – and long-term benefits. **Assaf et al., (2017)** in the study "Advertising spending, firm performance, and the moderating impact of CSR" investigated the potential of corporate social responsibility (CSR) to influence the link between advertising spending and firm performance. The study hypothesized that CSR positively moderates the relationship between advertising spending and firm performance. The study focus on two types of firm performance: sales and firm value. Using two samples from the hotel and restaurant industries, the study found that firms with higher levels of CSR enjoy higher returns on



advertising spending than firms with lower levels of CSR. The survey has theoretical and managerial implications of these findings and provides direction for future research.

Objectives of the Study

Following are the objectives of the study:

1. To understand the importance of CSR in India.
2. To assess the impact of CSR on the financial performance of selected pharmaceutical companies in India.

Hypothesis of the Study

H₁: Corporate Social Responsibility has a direct impact on the financial performance of Indian Pharmaceutical Companies

Methodology of the Study

The study is descriptive and analytical in nature and based on secondary data. It aims at studying the impact of CSR on financial performance in Indian pharmaceutical companies. Secondary data on financial performance was collected through annual reports of pharmaceutical companies, websites of National Stock Exchange (NSE), and Securities and Exchange Board of India (SEBI). The collected data was analyzed using SPSS. To test the impact of CSR, Chi-Square Test was used. Financial ratios were used to assess the impact of CSR on financial performance.

Financial Ratios

The analysis of financial performance interprets the financial health of a firm. The financial performance of the company helps the management in decision-making and control. Ratio analysis is one of the powerful tools of financial analysis. The ratios considered for analyzing the financial performance of the Net Profit Ratio (NPR), Return on Equity (ROE) and Return on Assets (ROA).

Data Analysis

SPSS software was used for editing and analyzing of data. Data was subjected to inferential statistics. Inferential statistics were used to conclude the collected data by testing the hypotheses. Chi-square was used to test the hypothesis.

Financial Performance of Pharmaceutical Companies in India

A) Net Profit Ratio (NPR)

Table 1: Net Profit Ratio

Year	Divi's Laboratories Ltd	Dr. Reddy's Laboratories Ltd	GlaxoSmithKline Pharmaceuticals Ltd	Cipla Limited	Torrent Pharmaceuticals Limited	Biocon Ltd	Alkem Laboratories Ltd	Cadila Healthcare Limited	Lupin Ltd	Aurobindo Pharma Limited
2016-2017	29.76	13.26	11.69	12.06	32.04	16.01	17.72	28.97	25.23	17.74
2017-2018	26.17	14.24	11.6	9.05	18.59	20.06	18.91	20.48	24.87	17.76
2018-2019	22.78	6.05	12.25	12.89	11.34	9.85	13.5	18.77	13.33	17.65
2019-2020	27.31	12.02	13.59	15.26	12.93	17.07	13.99	24.6	13.55	12.47
2020-2021	25.84	24.78	3.41	18.31	15.21	22.17	18.93	22.25	6.59	14.11

Source: Pharmaceuticals Companies listed in NSE in India, 2015-2020



It was observed in Divi's Laboratories Ltd; the Net Profit Margin was 29.76 in 2016-2017 which decreased to 25.84 in 2020-2021. The Net Profit Margin decreased to 6.05 in 2018-2019 which increased to 24.78 in 2020-2021 in Dr. Reddy's Laboratories Ltd. The Net Profit Margin in GlaxoSmithKline Pharmaceuticals Ltd was 13.59 in 2019-2020 which decreased to 3.41 in 2020-2021. It was observed in Cipla Limited; the Net Profit Margin was 12.89 in 2018-2019 which increased to 18.31 in 2020-2021. Net Profit Margin in Torrent Pharmaceuticals Limited decreased to 18.59 in 2017-2018 which further decreased to 11.34 in 2017-2018 and in 2020-2021 it was 15.21. The Net Profit Margin in 2018-2019 was 9.85 and increased at 22.17 in 2020-2021 of Biocon Ltd. Alkem Laboratories Ltd Net Profit Margin was 13.5 in 2018-2019 and suddenly increased to 18.93 in 2020-2021. It was found that the Net Profit Margin was fluctuating over the years. Dr. Reddy's Laboratories Ltd, Cipla Limited, Biocon Ltd and Alkem Laboratories Ltd had the highest Net Profit Margin during the study period implying that the company had strong sales. Glaxo SmithKline Pharmaceuticals Ltd, Torrent Pharmaceuticals Limited, Lupin Ltd, Aurobindo Pharma Limited and Cadila Healthcare Limited had the lowest Net Profit Margin during the study period signifying that weak sales or excess inventory.

B) Return on Equity (ROE)

Table 2: Return on Equity

Year	Divi's Laboratories Ltd	Dr. Reddy's Laboratories Ltd	GlaxoSmithKline Pharmaceuticals Ltd	Cipla Limited	Torrent Pharmaceuticals Limited	Biocon Ltd	Alkem Laboratories Ltd	Cadila Healthcare Limited	Lupin Ltd	Aurobindo Pharma Limited
2016-2017	25.46	11.67	16.98	12.2	47.01	6.14	19.45	32.46	23.76	23.69
2017-2018	19.47	11.93	16.6	7.61	19.17	7.94	20.1	10	21.25	20.23
2018-2019	14.59	4.8	16.92	10.4	10.57	3.53	14.65	14.08	8.51	18.15
2019-2020	19.11	10.07	19.85	11.96	14.86	6.92	14.63	17.33	8.98	13.47
2020-2021	18.76	19.33	5.98	13.32	18.32	5.85	20.13	12.54	4.16	14.37

Source: Pharmaceuticals Companies listed in NSE in India, 2015-2020

It was observed in Divi's Laboratories Ltd; the Return on Equity was 25.46 in 2016-2017 which decreased to 18.76 in 2020-2021. Return on Equity decreased to 4.8 in 2018-2019 which further increased to 19.33 in 2020-2021 on Dr. Reddy's Laboratories Ltd. Glaxo Smith Kline Pharmaceuticals Ltd Return on Equity in 2019-2020 was 19.85 which decreased to 5.98 in 2020-2021. It was observed in Cipla Limited the Return on Equity was 7.61 in 2017-2018 which increased to 13.32 in 2020-2021. Return on Equity of Torrent Pharmaceuticals Limited increased to 10.57 in 2018-2019 which further increased to 18.32 in 2020-2021. The Return on Equity in 2019-2020 was 6.92 which decreased to 5.85 in 2020-2021 of Biocon Ltd. Alkem Laboratories Ltd has a decline of Return on Equity in 2019-2020 of 14.63 and stood rising at 20.13 in 2020-2021. The Return on Equity of Cadila Healthcare Limited was 10 in 2017-2018 which further increased to 12.54 in 2020-2021. Lupin Ltd has a decreased Return on Equity in 2020-2021 of 4.16 from 23.76 of Return on Equity in 2016-2017. It is observed that Return on Equity of Aurobindo Pharma Limited was 23.69 in 2016-2017 where further decreased in 2019-2020 of 13.47 and stood 14.37 in 2020-2021.



C) Return on Assets (ROA)

Table 3: Return on Assets

Year	Divi's Laboratories Ltd	Dr. Reddy's Laboratories Ltd	GlaxoSmithKline Pharmaceuticals Ltd	Cipla Limited	Torrent Pharmaceuticals Limited	Biocon Ltd	Alkem Laboratories Ltd	Cadila Healthcare Limited	Lupin Ltd	Aurobindo Pharma Limited
2016-2017	22.03	7.71	12.19	9.59	23.91	5.19	14.51	22.83	19.88	12.94
2017-2018	16.96	8.41	11.14	6.24	10.61	6.95	14.97	5.99	17.6	13.1
2018-2019	12.77	3.31	8.87	8.59	4.07	3.08	10.5	8.96	7.19	11.47
2019-2020	16.57	7.86	10.88	10.25	6.19	5.97	10.96	10.86	7.81	8.43
2020-2021	16.12	15.08	3.51	11.36	7.87	5.3	13.88	8.53	3.51	9.58

Source: Pharmaceuticals Companies listed in NSE in India, 2015-2020

It was observed in Divi's Laboratories Ltd, the Return on Assets was 22.03 in 2016-2017 which decreased to 16.12 in 2020-2021. Dr. Reddy's Laboratories Ltd Return on Assets was 7.71 in 2016-2017 which increased to 15.08 in 2020-2021. The Return on Assets of Glaxo Smith Kline Pharmaceuticals Ltd in 2016-2017 was 12.19 which decreased to 10.88 in 2019-2020 and decreased to 3.51 in 2020-2021. It was observed in Cipla Limited, the Return on Assets was 9.59 in 2016-2017 which increased to 11.36 in 2020-2021. The Return on Assets of Torrent Pharmaceuticals Limited decreased to 4.07 in 2018-2019 which further increased to 7.87 in 2020-2021. It is observed that Biocon Ltd in 2016-2017 was 5.97 and stood at 5.3 in 2020-2021. Return on Assets of Alkem Laboratories Ltd was 10.5 where further increased to 10.86 in 2019-2020 and stood 13.88 in 2020-2021. Cadila Healthcare Limited Return on Assets in 2019-2020 was 10.86 and later decreased of 8.53 in 2020-2021. It was observed that Lupin Ltd, the Return on Assets in 2016-2017 was 19.88 in which further decreased to 3.51 on the year 2020-2021. Aurobindo Pharma Limited the Return on Assets of 12.94 in 2016-2017 and decreased to 9.58 in 2020-2021.

Corporate Social Responsibility in Indian Pharmaceutical Companies

The Companies Act 2013 requires every company which has a net worth of rupees five hundred crores or more, or turnover of rupees one thousand crores or more, or net profit of rupees, five crores or more, during any financial year to constitute a CSR committee and spend in every financial year at least 2% of the average net profits of the company made during the three immediately preceding financial years. The below table presents the CSR spending of the pharmaceutical companies listed in NSE in India.

Table 4: Corporate Social Responsibility in Indian Pharmaceutical Companies

Company	Year	Average Net Profit for the last three Financial Years (in crores)	Prescribed CSR Expenditure (in crores)	Spent amount (in crores)
Divi's Laboratories Ltd	2016-2017	1107	22.14	22.14
	2017-2018	1053	21.06	22.48
	2018-2019	869	17.38	18.34
	2019-2020	1332	26.64	25.38
	2020-2021	1372	27.44	30.50
Dr. Reddy's Laboratories Ltd	2016-2017	1,354	27.08	28.95
	2017-2018	1,384	27.68	29.32
	2018-2019	566	11.32	12.20
	2019-2020	1,277	25.54	28.44



	2020-2021	2,937	58.74	60.96
GlaxoSmithKline Pharmaceuticals Ltd	2016-2017	374	7.48	8.50
	2017-2018	336	6.72	6.60
	2018-2019	351	7.02	6.84
	2019-2020	425	8.5	9.8
	2020-2021	110	2.2	4.6
Cipla Limited	2016-2017	1395	27.9	26.7
	2017-2018	1042	20.84	21.36
	2018-2019	1419	28.38	26.80
	2019-2020	1509	30.18	32.40
	2020-2021	1546	30.92	32.80
Torrent Pharmaceuticals Limited	2016-2017	1733	34.66	36.84
	2017-2018	933	18.66	19.35
	2018-2019	678	13.56	15.80
	2019-2020	436	8.72	10.20
	2020-2021	1024	20.48	23.50
Biocon Ltd	2016-2017	368	7.36	6.40
	2017-2018	519	10.38	13.65
	2018-2019	238	4.76	3.80
	2019-2020	492	9.84	8.30
	2020-2021	436	8.72	8.60
Alkem Laboratories Ltd	2016-2017	700	14	13.68
	2017-2018	883	17.66	16.64
	2018-2019	715	14.3	15.8
	2019-2020	799	15.98	15.30
	2020-2021	1264	25.28	24.30
Cadila Healthcare Limited	2016-2017	2037	40.74	43.80
	2017-2018	661	13.22	16.43
	2018-2019	1090	21.8	23.64
	2019-2020	1439	28.78	31.30
	2020-2021	1353	27.06	28.79
Lupin Ltd	2016-2017	2830	56.6	60.43
	2017-2018	3141	62.82	60.89
	2018-2019	1344	26.88	24.58
	2019-2020	1538	30.76	30.60
	2020-2021	727	14.54	13.99
Aurobindo Pharma Limited	2016-2017	1626	35.52	39.34
	2017-2018	1706	34.12	35.68
	2018-2019	1812	36.24	37.55
	2019-2020	1529	30.58	32.74
	2020-2021	1872	37.44	39.57

(Source: National CSR Portal, Annual reports, CSR reports for the sample period for the pharmaceutical companies under study)

Hypothesis Testing

Hypothesis 1: Corporate Social Responsibility has a positive effect on financial performance of Indian Pharmaceutical Companies



Table 5: Chi-square test between financial performance and CSR

Sl. No.	Indicators	Pearson Chi-square	Contingency co-efficient	p-value
1	Net Profit Ratio	35.485	0.495	0.000
2	Return on Equity	30.254	0.469	0.000
3	Return on Assets	18.278	0.352	0.003

Table 5 shows the results of the chi-square test and the value of the test statistic for net profit ratio is 35.485 with a p-value of 0.000 which is statistically significant. The chi-square value of return on equity was 30.254 with a p-value of 0.000 which is statistically significant. The chi-square value of return on assets was 18.278 with a p-value of 0.003 which is statistically significant. From the above result, it is observed that p-value for all indicators when compared with CSR provide significant results which indicate that there Corporate Social Responsibility has a positive effect on financial performance of Indian Pharmaceutical Companies.

Conclusion

Financial management has great importance in making management decisions. The financial soundness of a company can be achieved maintaining liquidity and profitability of the company. The purpose of this study was to measure the impact of CSR on financial performance of pharmaceutical companies in India. The importance of analyzing performance ratios, to make comparisons with the companies from the same field of activity, to detect new tendencies and to make profitable changes require the use of advanced specific tools for multidimensional analysis, equipment's performance, qualified personal for interpreting the analysis and the strengths to take important decisions for the prosperity of the company. Pharmaceutical firms chosen for the study were keen to ensure adequate flow of information organizations that would enhance business operations by being responsive to the changing needs of end-users. The study also revealed that multinationals should consider outsourcing some of its functions to help them reduce costs, expand services and expertise, and helping organizations refocus on key objectives. The results of the study indicated that CSR had a direct impact on the financial performance of Indian pharmaceutical companies. CSR had a positive effect on the financial performances of pharmaceutical companies. The study concludes that corporate social responsibility significantly affects the firm's financial performance by developing a positive image among the stakeholders and decreasing overall costs.

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