

CORPORATE SOCIAL RESPONSIBILITY AND FINANCIAL PERFORMANCE ANALYSIS (A COMPARATIVE STUDY OF RASHTRIYA CHEMICALS AND FERTILIZERS LIMITED & NATIONAL FERTILIZERS LIMITED)

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ABSTRACT

The concept of business has changed from profit yielding activities to social betterment activities where business is responsible for all the stakeholders rather than shareholders only. CSR is a concept in which a company integrates social concern with their business operations. Involving in social activities can encourage business to act ethically. By doing CSR activities business can contribute to the society. This study investigate the financial performance of two selected popular Central Public Sector Undertakings i.e Rashtriya Chemicals and Fertilizers Limited (RCF) & National Fertilizers Limited (NFL) in Fertilizer Industry which are also listed at NSE & BSE using the financial data ranging from 2014-15 to 2019-20. Correlation analysis also used to calculate and explain the correlation among the CSR & various financial performance indicators. The most useful Financial Performance Indicators taken for this study are Net Profit before Tax (PBT), Earnings per share (EPS), Dividend per Share (DPS), Return on Assets (ROA), Return on Equity (ROE), Return on Capital Employed (ROCE), Net Profit Ratio, Book Value per Share and etc. This research paper concluded that RCF performing well and have a positive correlation between CSR & financial performance indicators in comparison of NFL.

KEYWORDS: CSR, FPI, Correlation, Profit before TAX (PBT), Net Profit Ratio, ROA, ROE, ROCE.

Introduction

"No success or achievement in material terms is worthwhile unless it serves the needs or interests of the country and its people."

- J.R.D. Tata

J.R.D. Tata was the first leading businessman to explicitly recognize that business does not operate in isolation from society. He remarked, *"The most significant contribution organized industry can make is by identifying itself with the life and the problems of the people of the community to which it belongs, and by applying its resources, skills and talents to serve and help them."* Corporations are investing in CSR Activities/Projects in an attempt to improve their reputation among the various stakeholders and compete with global corporations. Indian Corporations are explaining/elaborating about their CSR spending in their annual reports and CSR & Sustainability report to attract investors. Companies are using the CSR as a strategic tool, financial tool & marketing to establish good rapport with the public. If corporation will more committed towards social responsibility then financial performance of those corporations may also improve.

Review of Literature

Ransariya, S. N. & Bhayani, S. J. (2015) studied on the topic "Relationship between Corporate Social Responsibility and Financial Performance of RIL". The study was focused to calculate and analysis of correlation between CSR Index and other financial parameters i.e ROCE, RONW, EPS, OPR & NPR. The study concluded that there is no significant correlation between CSR and other Financial Parameters of RIL during the period of study from 2007-08 to 2011-12.

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Yadav, R. & Singh, F. B. (2016) studied on "Impact of Corporate Social Responsibility on Financial Performance of Indian Commercial Banks - An Analysis". The study checked about the significant impact of CSR on Financial Performance of Banks. The study taken the sample of mix selection of sample i.e. 2 Public Bank & 2 Private Bank. These banks were SBI, PNB, ICICI and Axis. This study concluded that Impact of CSR on overall banking performance is significantly positive but individually it's different. In Public sector banks impact of CSR on profit insignificantly positive and in private sector banks impact of CSR on profit significantly positive. Trends of CSR expenditure in all selected banks is increasing.

Bafna, A. (2017) conducted a study on "A study on the impact of CSR on Financial Performance of Companies in India". The researcher evident that CSR has positive impact on Net profit of the company but doesn't have positive impact on EPS and ROA. He concludes that CSR has impact on profit of the company if company spend more towards CSR activities which results in sustainable development of the company as well as society.

Mittal, A. & Sandhu, N. (2018) in their research paper titled "Relationship between Corporate Social Responsibility, Dividend pay-out, EBITDA, and Earnings per Share: An Empirical Analysis of 40 Listed Companies in NSE" calculated and analysed the correlation between CSR and EPS, CSR and Dividend pay-out Ratio, CSR and EBITDA year wise and company wise during the period 2013 to 2017. It was concluded that there was a positive relationship between the CSR and Dividend, EPS & Dividend. Further, the study suggested that companies who are occurring higher losses due to CSR, government can reduce the percentage of mandatory CSR for them.

Abhilasha, N. & Tyagi, M. (2019) conducted a study on "Impact of CSR on Financial Performance of Top 10 performing CSR Companies in India". The study found that contributing towards CSR is having positive impact on financial performance of the firm. When CSR contribution increases there financial performance also increases. Researchers advised to companies that they should contribute more towards CSR activities which significantly impacts on both financial and non-financial performance.

Need of Study

To understand the concept of CSR, Obligation of CSR and to analyse the correlation among CSR and various Financial Performance Indicators of RCF & NFL in particularly Fertilizer Industry. This study will also calculate & elaborate the relationship among the CSR and various financial performance indicators of the selected companies during the period of study. This study will also compare the various Financial Performance Indicators of RCF & NFL along with CSR Analysis.

Objectives of the Study

The study have following specific objectives:

- To know about the concept & obligation of CSR.
- To analyse the financial performance of RCF & NFL.
- To calculate the correlation among CSR and various Financial Performance Indicators for RCF & NFL under the period of study.
- To study that to what extent RCF and NFL are performing with fulfilling their Social responsibilities towards various stakeholders.

Research Methodology

The study is purely based on the secondary sources of data collected through published annual reports of the selected companies. For analysing & compare the relationship between CSR and various Financial Performance Indicators in fertilizer industry, a sample of 2 Public Sector Undertakings have taken from the population. To meet the objective, the data for the study are collected through annual reports of RCF & NFL for the six years from the year 2014-15 to 2019-20. Other important data have been collected from different newspapers, online print media, live news Channels, various published reports/research reports from NSE/other financial/CSR related sites for proper study. The focus of the study is on quantitative analysis of the data collected. Data is primarily tabulated in a table and percentage analysis used as a basic tool for analysis. The MS Excel package is used to calculate the variables using percentage analysis/Ratio Analysis and to calculate correlations amongst all the all financial performance indicators and CSR.

Meaning of Corporate Social Responsibility (CSR)

Corporate Social Responsibility is defined as a "Framework of measurable corporate policies and procedures and resulting behavior designed to benefit the workplace and, the individual, the organization, and the community" (Tai & Chuang, 2014). Businesses nowadays, are integrating environmental and social concerns in their interactions and operations to enhance equity to stakeholders while pursuing organizational goals. Organizations are also actively engaging on social responsibilities activities to take part in solving community problems.

Obligation of CSR

As per sub-section (1) of Section 135 of the Companies Act, 2013, the CSR Provisions will be applicable on the companies which fulfill any of the following criteria during immediately preceding financial year:-

Companies having net worth of rupees 500 crore or more
OR
Companies having turnover of rupees 1000 crore or more
OR
Companies having a net profit of rupees 5 crore or more

Every such company is required to constitute a CSR Committee of the Board. Every such company is required to spend at least 2% of the average net profits of the company made during the three immediately preceding financial years in every financial year.

Data Analysis and Findings

Table 1: CSR and Financial Performance Parameters of RCF Limited

Years	Variables									
	Total CSR Spent (₹ Lakh)	Prescribed CSR Expenditure (₹ Lakh)	Net Profit before Tax (₹ Lakh)	EPS (₹)	DPS (₹)	ROA (%)	ROE (%)	ROCE (%)	Net Profit Ratio (%)	Book Value per Share (₹)
2014-15	830.00	802.00	50963.00	5.84	1.80	5.16	11.88	17.94	4.18	49.10
2015-16	965.72	937.76	29110.00	3.47	1.10	2.48	6.75	12.28	2.21	51.30
2016-17	862.51	861.00	24873.00	3.25	1.10	2.74	6.12	9.40	2.48	53.00
2017-18	779.32	773.14	12822.00	1.43	0.60	1.24	2.68	4.77	1.08	53.10
2018-19	387.59	384.00	23525.00	2.52	0.77	1.56	4.58	8.72	1.57	55.00
2019-20	341.54	323.00	20293.00	3.77	2.84	2.02	6.53	12.10	2.15	57.80
Mean	694.45	680.15	26931.00	3.38	1.37	2.53	6.42	10.87	2.28	53.22
Std. Deviation	263.10	259.93	12971.11	1.47	0.83	1.40	3.08	4.42	1.06	3.00
Maximum	965.72	937.76	50963.00	5.84	2.84	5.16	11.88	17.94	4.18	57.80
Minimum	341.54	323.00	12822.00	1.43	0.60	1.24	2.68	4.77	1.08	49.10

Source: Compiled from Annual Reports of the RCF and calculated from MS Excel

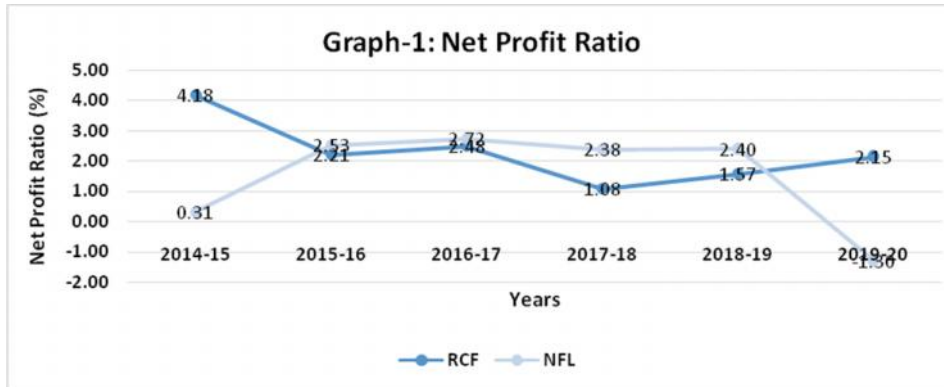
Table 2: CSR and Financial Performance Parameters of National Fertilizers Limited

Years	Variables									
	Total CSR Spent (₹ Lakh)	Prescribed CSR Expenditure (₹ Lakh)	Net Profit before Tax (₹ Lakh)	EPS (₹)	DPS (₹)	ROA (%)	ROE (%)	ROCE (%)	Net Profit Ratio (%)	Book Value per Share (₹)
2014-15	36.74	0.00	4472.00	0.53	1.70	0.19	1.77	5.03	0.31	30.20
2015-16	125.00	0.00	28349.00	4.02	1.21	1.62	12.26	8.46	2.53	32.80
2016-17	261.77	111.36	32488.00	4.24	0.00	2.04	11.39	10.25	2.73	37.20
2017-18	296.83	434.54	33483.00	4.34	0.00	2.20	10.70	10.25	2.38	40.50
2018-19	228.81	630.00	46337.00	6.08	1.86	2.14	13.44	14.50	2.43	45.20
2019-20	574.56	750.00	-25271.00	-3.49	0.95	-1.17	-8.90	10.66	-1.30	39.20
Mean	253.95	320.98	19976.33	2.62	0.95	1.17	6.78	9.86	1.51	37.52
Std. Deviation	183.92	329.38	26044.82	3.50	0.81	1.37	8.74	3.09	1.64	5.42
Maximum	574.56	750.00	46337.00	6.08	1.86	2.20	13.44	14.50	2.73	45.20
Minimum	36.74	0.00	-25271.00	-3.49	0.00	-1.17	-8.90	5.03	-1.30	30.20

Source: Compiled from Annual Reports of the NFL and calculated from MS Excel

- **Net Profit Ratio:** Net Profit Ratio is a financial ratio used to calculate the percentage of profit of a company produces from its total revenue. This is calculated by the following formula:

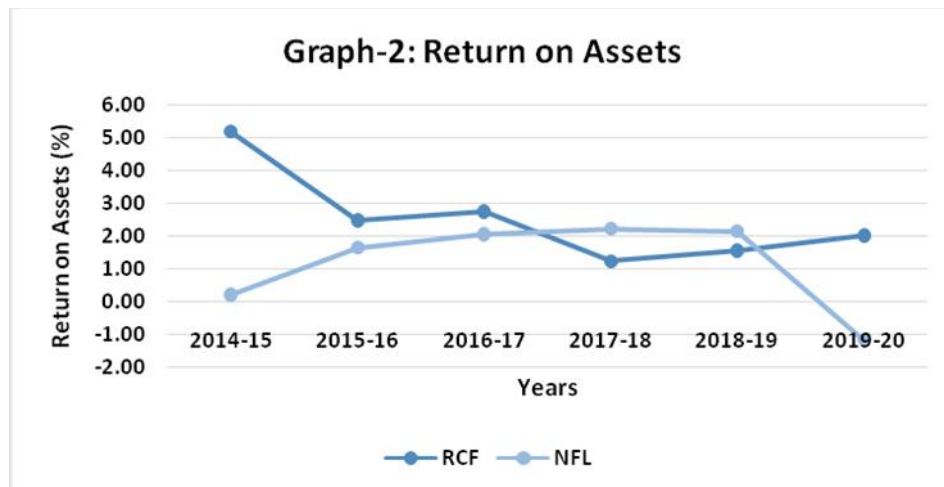
$$\text{Net Profit Ratio} = (\text{Net Profit after Tax}/\text{Net Sales}) * 100$$



As per the analysis of Table-1 & 2 and Graph-1, it is clear that the average Net Profit Rate of RCF is 2.28% which is higher than 1.51 % of NFL. In the year 2014-15, the Net Profit Ratio of NFL was very low as compared to RCF but during the year 2015-16 to 2018-19 the rate of Net Profit was constant between 2% to 3%. Further in the year 2019-20, the NFL recorded the loss. It is clear that RCF is performing well in case of profitability as compared to NFL.

- **Return on Assets (ROA):** Profitability can also be measured by establishing relationship between net profit and total assets. This ratio measures the relationship between total funds invested i.e. total assets and net profit after tax. It is calculated by the following formula:

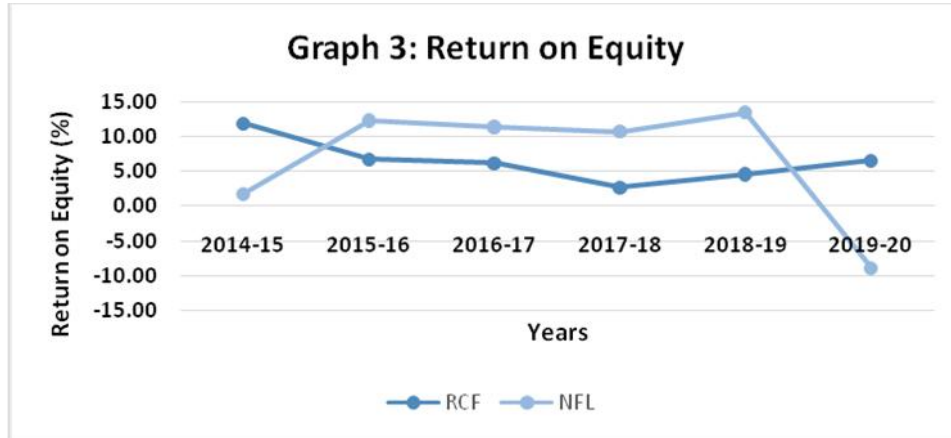
$$\text{Return on Total Assets} = (\text{Net Profit after Tax}/\text{Total Assets}) * 100$$



As per the analysis of Table-1 & 2 and Graph-2, it is clear that the mean value of Return on total Assets of RCF is 2.53% which is higher than 1.17 % of NFL. In the year 2017-18 & 2018-19, the return on total assets of NFL was very high as compared to RCF but during the year 2019-20 it is gone in negative i.e. -1.17 %. The higher the ratio, the better is the profit earning capacity of company or vice-versa. Hence, it can be stated that the earning capacity of RCF is better than NFL.

- **Return on Equity (ROE):** Return on equity (ROE) is a measure of financial performance calculated by dividing net profit after tax by shareholders' equity. ROE can be considered a measure of the profitability of a corporation in relation to stockholders' equity. This ratio may be calculated by the following formula:

$$\text{Return on Equity} = (\text{Net Profit after Tax}/\text{Shareholder's Equity}) * 100$$



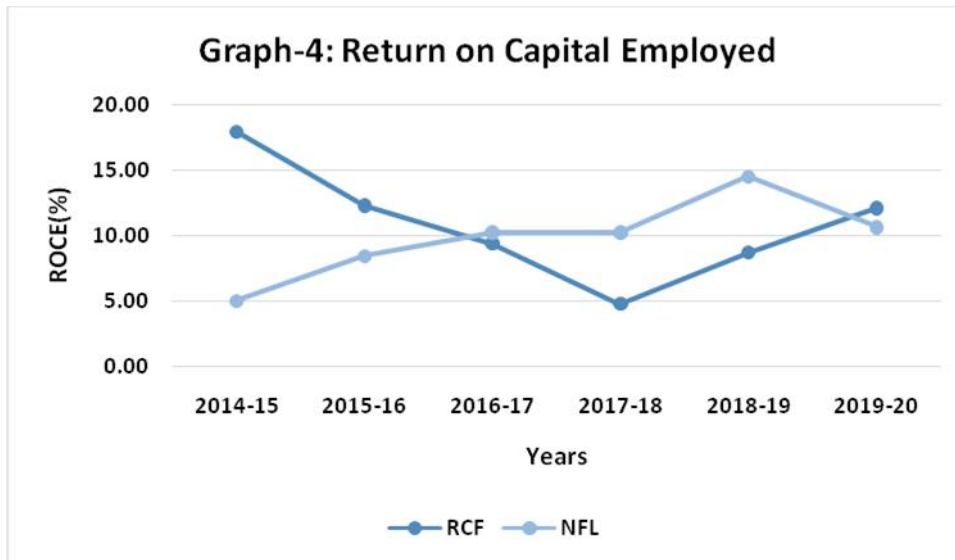
As per the analysis of Table-1 & 2 and Graph-3, it is clear that the mean value of Return on Equity of NFL is 6.78% which is higher as compared to 6.42% of RCF. During the year 2015-16 to 2018-19, the return on total assets of NFL is very high as compared to RCF but during the year 2019-20 it is gone in negative i.e. -8.90 %. This ratio measures the amount of earnings for each rupee that the shareholders have invested in the company. The higher the ratio the more favourable. It can be stated that NFL is better as compared to RCF on the basis of return on Equity.

- Return on Capital Employed (ROCE):** Return on capital employed (ROCE) is a formula to measure the overall profitability of the firm, it is essential to compare profit with capital employed. This ratio express the relationship between profit and calculated in percentage by dividing the net profit by capital employed. This ratio may be calculated by the following formula:-

$$\text{Return on Capital Employed} = (\text{Net Profit before interest \& tax} / \text{Capital Employed}) * 100$$

OR

$$\text{Return on Capital Employed} = \text{Assets Turnover} \times \text{Profit Margin}$$



As per the analysis of Table-1& 2 and Graph-4, it is clear that the mean value of Return on Equity of RCF is 10.87 % which is higher as compared to 9.86 % of NFL. During the year 2019-20, the return on Capital Employed of RCF & NFL are 12.10% and 10.66% respectively. The higher the ratio the more favourable. It can be stated that RCF is better as compared to NFL as per this parameter.

- **Book Value per share, Earnings per share (EPS) & Dividend per Share (DPS):** These ratios are helpful to the shareholders in analyzing their present and prospective investment. With the help of these ratios, the shareholders can also compare the value of their investment with dividend, earnings and book value. These ratios can be used for Investment Analysis or Market Test.

Book Value per Share =

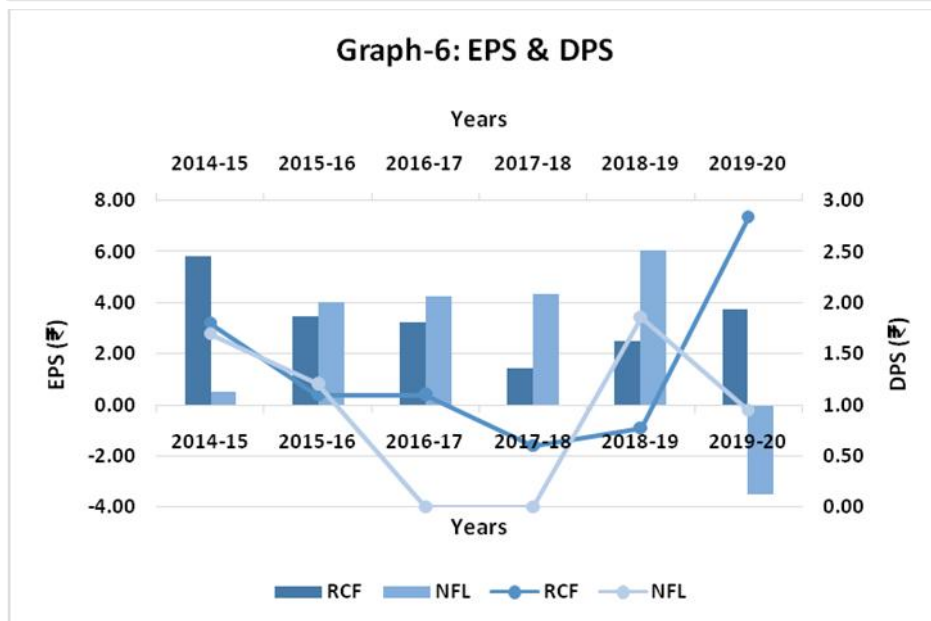
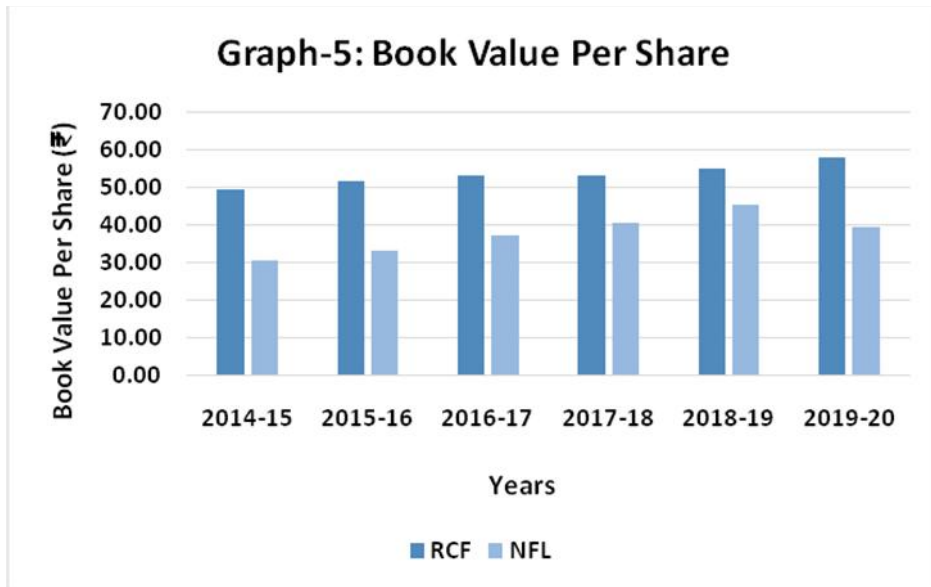
{Equity Capital + Reserves - P. & L. a/c (after dep.)} / Total Number of Equity Shares

Earnings per Share (EPS) =

{Profit after Tax – Preference Dividend} / Number of Equity Shares

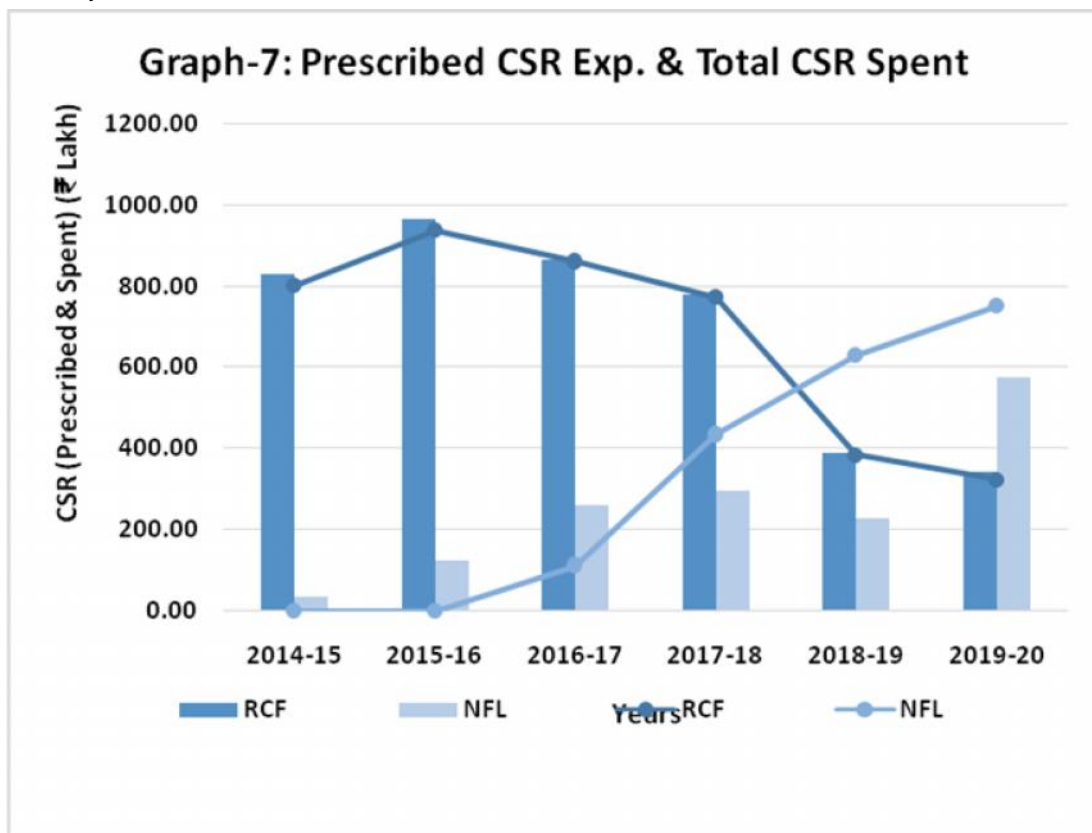
Dividend per Share (DPS) =

Dividend paid to Equity Shareholders / Number of Equity Shares Outstanding



As per the analysis of Table-1 & 2 and Graph-5 & Graph-6, it is clear that the mean value of Book value per share of RCF Limited is ₹ 53.22 per share which is higher than ₹ 37.52 per share of NFL. It is good a sign for stakeholders that RCF have a higher book value. Earnings per share of RCF is positive during the period of study but NFL's EPS in the year 2019-20 is negative. The mean value of EPS of RCF Limited is ₹ 3.38 per share which is higher as compared to ₹ 2.62 per share of NFL. RCF paid the dividend per share each year during the period of study but NFL not paid the dividend in the 2016-17 & 2017-18. The mean value of DPS of RCF Limited is ₹ 1.37 per share which is higher than ₹ 0.95 per share of NFL under the period of study. In overall it can be stated that RCF is performing well as per Investment Analysis or Market Test or in the eyes of shareholders.

- Prescribed CSR Expenditure and Total CSR Spent:** As per sub-section (1) of Section 135 of the Companies Act, 2013, the CSR Provisions will be applicable on the companies which fulfill prescribed criteria and such company is required to spend at least 2% of the average net profits of the company made during the three immediately preceding financial years in every financial year.



As per analysis of Table-1 & 2 and Graph-7, it is crystal clear showing that the amount of CSR Spent of RCF is greater than prescribed CSR Expenditure. It shows that RCF is complying the CSR provisions. Due to average loss in the year 2014-15 & 2015-16, NFL was not liable for CSR obligation but company spent some CSR amount out of CSR Reserve. In 2016-17, the NFL spent the more than prescribed CSR amount but from the year 2017-18 & onwards company did not spent the full prescribed CSR amount due to long term projects as mentioned in board reports of the company. The mean value of Prescribed CSR Expenditure and Total CSR Spent of RCF Limited is ₹ 680.15 Lakh & ₹ 694.45 Lakh respectively which are higher as compared to ₹ 320.98 Lakh & ₹ 253.95 Lakh of NFL. Maximum CSR Spent of RCF was ₹ 965.72 Lakh in the year 2015-16 and for NFL, it was ₹ 574.56 Lakh in the year 2019-20. It may be concluded that Rashtriya Chemicals and Fertilizers Limited (RCF) have compliances with the provision of Companies Act, 2013 for amount spending for the purpose of CSR from 2014-15 & onwards and fulfilling the social commitments on account of Corporate Social Responsibility.

Table-3: Correlation Analysis among the CSR and various Financial Performance Indicators of Rashtriya Chemicals and Fertilizers Limited (RCF)

Variables	Total CSR Spent	Prescribed CSR Expenditure	Net Profit before Tax	EPS	DPS	ROA	ROE	ROCE	Net Profit Ratio	Book Value per Share
Total CSR Spent	1.000									
Prescribed CSR Expenditure	0.999	1.000								
Net Profit before Tax	0.334	0.308	1.000							
EPS	0.154	0.122	0.919	1.000						
DPS	-0.422	-0.450	0.250	0.601	1.000					
ROA	0.405	0.381	0.963	0.932	0.329	1.000				
ROE	0.244	0.213	0.956	0.992	0.508	0.965	1.000			
ROCE	0.138	0.103	0.912	0.986	0.592	0.890	0.977	1.000		
Net Profit Ratio	0.311	0.287	0.950	0.970	0.441	0.989	0.985	0.929	1.000	
Book Value per Share	-0.835	-0.825	-0.708	-0.445	0.367	-0.700	-0.550	-0.438	-0.596	1.000

Source: Calculated from MS Excel

Table 4: Correlation Analysis among the CSR and various Financial Performance Indicators of National Fertilizers Limited (NFL)

Variables	Total CSR Spent	Prescribed CSR Expenditure	Net Profit before Tax	EPS	DPS	ROA	ROE	ROCE	Net Profit Ratio	Book Value per Share
Total CSR Spent	1.000									
Prescribed CSR Expenditure	0.806	1.000								
Net Profit before Tax	-0.510	-0.235	1.000							
EPS	-0.524	-0.256	0.999	1.000						
DPS	-0.360	0.036	-0.097	-0.087	1.000					
ROA	-0.451	-0.266	0.981	0.980	-0.278	1.000				
ROE	-0.573	-0.371	0.983	0.989	-0.124	0.978	1.000			
ROCE	0.489	0.735	0.396	0.381	-0.040	0.353	0.283	1.000		
Net Profit Ratio	-0.496	-0.378	0.962	0.967	-0.269	0.983	0.987	0.284	1.000	
Book Value per Share	0.536	0.826	0.336	0.312	-0.103	0.306	0.194	0.956	0.192	1.000

Source: Calculated from MS Excel

The main purpose of this study is to explore the correlation between Prescribe CSR Expenditure & total CSR Spent and various indicators of financial performance i.e. Profit before tax, EPS, DPS, ROA, ROE, ROCE, Net Profit Ratio & Book Value per Share. This research study shows that during the period from 2014-15 to 2019-20, there is negative correlation between CSR and Dividends in RCF & NFL. The study verifies the study that higher the payment for CSR lower will be the dividend or higher the dividend lower will be the spending on CSR. On the contrary, correlation between EPS and CSR keeps a low positive correlation in RCF and negative relationship in NFL. In case of CSR and book value per share, NFL & RCF have positive & negative relationship respectively. Also from the correlation analysis, the established relationship between EPS and DPS can be verified that there is positive moderate relation between the two in RCF and low negative relationship in NFL. This also means that higher the EPS higher will DPS in RCF. On the other hand, there are positive correlation between Total CSR Spent and N.P. Ratio, ROA, ROE & Net profit before tax in RCF under the period of study but there are negative correlation between Total CSR Spent and N.P. Ratio, ROA, ROE & Net profit before tax in NFL. RCF & NFL have a positive correlation between total CSR spent and ROCE. On other hand, the prescribed CSR Expenditure (2% of Average Profits) and total CSR spent have a strong positive correlation in RCF (+0.999) as compared to NFL (+0.806). It means RCF is fully committed & complying the CSR Provisions as per the Companies Act, 2013 as compared to NFL.

Limitations of the Study

The study considered only two companies of Fertilizer Industry for the findings. The companies taken for study are central public sector undertakings. It is the opportunity for further studies to take more companies in a particular industry or mix selections of Government & Private for detailed analysis. The study is purely conducted on the basis of secondary data. The study included the data for only six years from 2014-15 to 2019-20 after the applicability of CSR provisions as per the Companies Act, 2013.

Conclusion

RCF Limited is well in overall financial performance as compared to NFL and it is continuously spending the CSR amount equal or higher than the 2% of Average Profit (Prescribed CSR Amount). It shows that Rashtriya Chemicals and Fertilizers Limited (RCF) have compliances with the provision of Companies Act, 2013 for amount spending for the purpose of CSR from 2014-15 & onwards and have a fully social commitments on account of Corporate Social Responsibility as per the laws. National Fertilizers Limited is required to improve their financial performance and to be more committed towards the CSR because of negative correlation found in study. It can be a suggestion that companies which are in a sound financial position may pay more attention towards Corporate Social Responsibility than the prescribed CSR Expenditure.

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