Impact of Corporate Social Responsibility on Financial Performance of Select Sectors of Indian Stock Market

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Abstract

The Companies Act, 2013 made it obligatory for companies' to spend at least 2% of average net profits of 3 immediately preceding financial years on specified areas of social causes for the betterment of stakeholders and society in general. The present study examines the impact of CSR spending on financial parameters for six sectors, viz. Oil and Gas, Chemicals, Metals and Mining, Consumer durables, Pharmaceutical and Construction/Cement sector comprising of 30 companies' for six years 2014 - 2020. The results indicate that corporate social responsibility has an impact on financial performance of firms'. Further the impact is more evident for environmentally sensitive sectors than environmentally insensitive sectors.

Keywords: Corporate social responsibility, financial performance, net profit, return on assets, earnings per share

Introduction

Corporate Social Responsibility (CSR) is a way of managing the business process while taking initiatives for improving the social, economic and environmental development with the consideration of the human rights. It aims at making profit considering the welfare of the society. Corporate Social Responsibility helps in the nation building process by improving the corporate governance, transparency and accountability to the stakeholders (Tamvada, 2020). Empirical studies reveal that CSR has positive impact on financial performance of organisations (Wu et.al., 2020; Tyagi and Nagarachari,2019; Menezes, 2019 and Lee and Jung,2016).

Literature review

Dynamic Panel regression model was used by Jaisinghani and Sekhon (2020) to study the impact of CSR disclosures with respect to profitability for listed firms in India. The results indicated CSR disclosures to be significant. The relation between CSR and financial performance of private general insurance companies was examined by Mehta and Oza (2019). They concluded the existence of correlation between firm's CSR and net income. A positive effect of CSR on firms' performance was established by Laskar and Maji (2016). Similar positive effect of CSR on financial performance was obtained by Lee & Jung (2016), Wang (2014) Siddiq & Javed (2014) and Kanwal, Khanam, Nasreen and Hameed (2013), Kaur and Dave (2021). Adapting Isaksson's research (2012) to Indian context, Mitra (2021) concluded that CSR has both a positive and significant impact on firm performance.

Contrary to the above results, Aupperle,, Carroll and Hatfield (1985) concluded that firms with a corporate social responsibility committee on their boards did not differ in profitability from other firms. McWilliams & Siegal (2000) found that CSR has a neutral impact on financial performance. Sharma, Sharma, Ali and Dadhich, (2021) inferred that there is no significant association between CSR Score and Financial Performance of Manufacturing Sector Companies. A study of Indian firms by Mishra and Saur (2010) established that listed firms showed responsible business practices and better financial performance than the non-listed firms.

Previous studies in CSR of Indian companies focus on analysing certain specific sectors or companies. Some studies analysed top companies based on CSR activities Kaur and Tandon (2017) and Ahluwalia (2018). Gupta, Bhadoria and Singh (2019) compared Maruti Suzuki India Ltd. and Tata Motors Ltd. Vethirajan (2014) analysed pharmaceutical sector and Sharma and Bhatnagar (2014) on mining industry, Prior to the amendentment of companies Act 2013, Gautam and Singh(2010) conducted an exhaustive study of

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top 500 companies identifying key CSR activities and mapping it to Global Reporting Initiative standards. The current research aims to analyse the impact of CSR on financial performance. It encompasses six sectors, consisting of 30 companies, further classifying the sectors into environmentally sensitive and environmentally insensitive. It also attempts to compare the two groups in terms of significance of CSR on financial performance.

Objectives

- To determine the average CSR expenditure and financial performance of select companies from 2014 to 2020.
- To examine the relation between CSR outlay and the financial performance of the select sectors.
- To analyse the impact of CSR outlay on the financial parameters.
- To compare the impact of CSR outlay on the financial parameters between Group I and Group II sectors.

Research Design

The purpose of the study is to examine the impact of CSR activities on the profitability of the company. Data for six years from 2014-2020 of five companies each from six select sectors listed on National Stock Exchange (NSE) are taken for the study. The dependent variable is the CSR expenditure and the independent variables are Net profit, Return on Assets (ROA), Return on Equity (ROE), Return on Capital Employed (ROCE) and Earning per Share (EPS). The study is based on secondary data sources collected from Sustainability, Annual and CSR reports of the Companies, Notes to accounts, Director's Report, Auditors report and Schedule and Official websites. The sectors are further classified into Group I and Group II. The environmentally sensitive sectors are considered as Group-I involving Oil and Gas, Chemicals, Metals and Mining sector and Group-II being insensitive to the environment, consisting of Consumer durables, Pharmaceutical and Construction/Cement sector.

Null Hypothesis: H_0

There is no significant impact of CSR outlay on the firm's financial performance.

Alternate Hypothesis: H_1

There is a significant impact of CSR outlay on the firm's financial performance.

Results and Discussions

Table 1: Average financial values for the years' 2014-2020

Sl. No	Company	(Rs Cr)		%			Rs.
		CSR Outlay	Net Profit	ROA	ROE	ROCE	EPS
1	ONGC India	522.0	18654.5	7.2	11.2	14.6	15.7
2	HPCL	118.8	4638.0	5.5	22.6	15.5	58.4
3	MRPL	21.3	487.8	1.8	3.5	6.4	2.8
4	Oil India	115.5	2367.1	5.6	10.3	11.1	29.6
5	Jindal Drilling	0.7	22.4	1.9	1.8	2.6	8.2
6	Premier Explosives	0.3	6.2	3.3	5.9	9.9	6.6
7	Finolex Industries	6.9	277.7	10.2	14.7	20.6	21.6
8	Tide Water Oil Co.	1.1	108.5	13.5	15.1	23.2	557.5
9	Pidilite	19.2	843.1	18.8	24.8	35.5	16.5
10	Solar Industries	3.4	148.5	13.5	20.2	25.2	32.5
11	Jindal Steel	68.9	-458.8	-0.8	-1.8	5.3	-5.0
12	APL Apollo	0.3	84.1	4.3	10.5	14.3	35.3

Sl. No	Company	(Rs Cr)		%			Rs.
		CSR Outlay	Net Profit	ROA	ROE	ROCE	EPS
13	Hindustan Copper	4.8	-28.5	-0.6	-5.8	1.7	-0.3
14	NMDC Ltd.	184.9	4016.2	13.0	14.8	23.3	11.6
15	NALCO	29.2	998.4	6.5	8.8	12.4	4.7
16	Whirlpool India	6.9	332.5	10.9	20.8	30.6	26.2
17	Voltas Ltd.	8.4	447.3	7.7	15.4	20.2	13.5
18	Blue star Ltd.	1.9	127.0	4.6	15.4	15.7	13.4
19	Havells India ltd.	14.5	659.4	12.3	19.8	25.9	10.6
20	Bajaj Electricals	2.0	73.3	2.0	7.9	15.7	7.2
21	Biocon Ltd.	8.2	403.5	6.2	7.5	7.6	13.2
22	Piramel Enterprises	26.0	335.3	1.5	2.5	6.8	20.0
23	Glaxo Smith Kline	11.1	345.1	10.2	16.0	27.9	35.5
24	Abbott India	8.4	367.6	15.7	23.1	34.7	173.0
25	Sun Pharma	5.0	293.8	0.7	0.5	3.5	1.3
26	NCC Ltd.	4.0	301.7	2.7	7.2	16.1	5.3
27	J Kumar Infra projects	3.0	133.7	4.8	9.9	14.5	21.1
28	MBL Infra	0.04	75.3	0.002	7.0	7.3	18.7
29	Deccan Cements	0.9	42.3	7.3	12.1	17.2	38.0
30	Simplex Infra	1.5	35.1	0.4	2.5	9.9	8.1

Table 2: Correlation and Regression summary for Oil & Gas Sector

	Correlation Coefficient	Regression				Regression Statistics	
		Coefficients	Standard Error	t Stat	P-value		
Intercept	-	-17.92	60.78	-0.29	0.77	Multiple R	0.65
Net Profit	0.94	7.26	4.50	1.62	0.12	R Square	0.43
ROA	0.36	-14.78	23.98	-0.62	0.54	Adjusted R Square	0.31
ROE	0.13	-14.50	8.90	-1.63	0.12	Standard Error	163.32
ROCE	0.32	30.50	14.98	2.04	0.05	Observations	30
EPS	-0.03	-0.04	1.59	-0.03	0.98		

The co-efficient of correlation between net profit and CSR spending for Oil and Gas sector has very high degree of positive correlation (0.94). There is a low degree of positive correlation with ROA and ROCE whereas ROE shows a very low degree of positive correlation. EPS is negatively correlated with the CSR spending. Co-efficient of determination implies that 43% of variation in the CSR spending is explained by the financial indicators of NP margin, ROA, ROE, ROCE and EPS.

Table 3: Correlation and Regression summary of Chemical Sector

	Correlation Coefficient	Regression				Regression Statistics	
		Coefficients	Standard Error	t Stat	P-value		
Intercept	-	0.87	2.34	0.37	0.71	Multiple R	0.85
NP Margin	0.97	0.14	0.44	0.31	0.76	R Square	0.73
ROA	0.57	3.20	0.80	4.01	0.0005*	Adjusted R Square	0.67
ROE	0.60	-1.98	0.54	-3.68	0.0012*	Standard Error	4.36
ROCE	0.62	0.07	0.26	0.26	0.80	Observations	30
EPS	-0.23	-0.03	0.01	-4.19	0.0003*		

*Significant at 5% level

The correlation co-efficient between net profit with CSR spending for Chemical sector exhibits a very high degree of positive correlation (0.97). There is moderate to high degree of positive correlation with ROA, ROE and ROCE is also computed. 73% of variation in the CSR spending is explained by the financial indicators of NP margin, ROA, ROE, ROCE and EPS. The CSR spending for Chemical sector has significant impact on ROA, ROE and EPS

Table 4: Correlation and Regression summary of Metals & Mining Sector

	Correlation Coefficient	Regression				Regression Statistics	
		Coefficients	Standard Error	t Stat	P-value		
Intercept	-	12.01	13.22	0.91	0.37	Multiple R	0.91
NP Margin	0.79	6.11	1.03	5.95	0.00*	R Square	0.82
ROA	0.54	-10.31	4.87	-2.12	0.04*	Adjusted R Square	0.78
ROE	0.28	-6.00	1.08	-5.56	0.00*	Standard Error	33.42
ROCE	0.52	6.52	2.17	3.00	0.01*	Observations	30
EPS	-0.09	-0.11	0.49	-0.22	0.83		

A high degree of positive correlation co-efficient between net profit and CSR spending can be observed for Metals and Mining sector from Table 4. There is a low to moderate degree of positive correlation with ROE, ROCE, and ROA. Further 82% of variation in the CSR spending is explained by the financial indicators of NP margin, ROA, ROE, ROCE and EPS. It can be further observed that CSR spending has significant impact on Net Profit, ROA, ROE and ROCE for metals and mining sector

Table 5: Correlation and Regression summary of Consumer Durable Sector

	Correlation Coefficient	Regression				Regression Statistics	
		Coefficients	Standard Error	t Stat	P-value		
Intercept	-	4.85	2.67	1.82	0.08	Multiple R	0.83
NP Margin	0.93	1.01	0.59	1.70	0.10	R Square	0.68
ROA	0.65	0.94	0.66	1.42	0.17	Adjusted R Square	0.62
ROE	0.30	-0.60	0.21	-2.79	0.01*	Standard Error	3.32
ROCE	0.39	-0.06	0.17	-0.34	0.73	Observations	30
EPS	0.17	-0.01	0.10	-0.07	0.95		

*Significant at 5% level

The correlation co-efficient between net profit and CSR outlay for Consumer Durable sector reflects a very high degree of positive correlation. A moderate degree of positive correlation exists for ROA, ROE, ROCE and EPS with CSR spending. Co-efficient of determination infers that 68% of variation in the CSR spending is explained by the financial indicators of NP margin, ROA, ROE, ROCE and EPS. However CSR outlay has significant impact only on ROE for consumer durable sector.

Table 6: Correlation and Regression summary of Pharmaceutical sector

	Correlation Coefficient	Regression				Regression Statistics	
		Coefficients	Standard Error	t Stat	P-value		
Intercept	-	13.53	2.87	4.71	0.00	Multiple R	0.47
NP Margin	-0.08	0.19	0.19	1.00	0.33	R Square	0.22
ROA	-0.31	-2.01	1.35	-1.48	0.15	Adjusted R Square	0.06
ROE	-0.26	0.46	1.08	0.43	0.67	Standard Error	7.73
ROCE	-0.19	0.23	0.31	0.75	0.46	Observations	30
EPS	-0.10	0.04	0.03	1.21	0.24		

The correlation co-efficient of net profit with CSR outlay for pharmaceutical sector implying low degree of negative correlation. Other financial parameters are also negatively correlated with the CSR spending. 22% of variation in the CSR spending is explained by the financial indicators of NP margin, ROA, ROE, ROCE and EPS. It can be inferred that CSR outlay has no significant impact on the financial parameters of pharmaceutical sector.

Table 7: Correlation and Regression summary of Construction / Cement sector

	Correlation Coefficient	Regression				Regression Statistics	
		Coefficients	Standard Error	t Stat	P-value		
Intercept	-	1.06	0.94	1.13	0.27	Multiple R	0.65
NP Margin	0.60	-0.03	0.02	-1.76	0.09	R Square	0.42
ROA	0.21	0.21	0.17	1.24	0.23	Adjusted R Square	0.30
ROE	0.06	0.31	0.12	2.55	0.02	Standard Error	1.68
ROCE	0.32	0.03	0.11	0.24	0.81	Observations	30
EPS	-0.13	-0.13	0.04	-3.53	0.00*		

*Significant at 5% level

Net profit is moderately correlated with CSR spending for Construction/Cement sector. ROE has low degree of positive correlation with the CSR spending whereas EPS is negatively correlated. Co-efficient of determination implies that 42% of variation in the CSR spending is explained by the financial indicators of NP margin, ROA, ROE, ROCE and EPS. CSR pending has significant impact only on EPS for construction and cement sector.

Table 8: Coefficient of Correlation between CSR spending and Net Profit

	Correlation
Group I Sector	0.97
Group II Sector	0.65

Table 9: Regression Values for Group-I

	Coefficients	t Stat	P-value
Intercept	42.63	1.72	0.09
NP Margin	7.55	5.36	0.00*
ROA	-18.60	-2.41	0.02*
ROE	-0.80	-0.39	0.70
ROCE	6.10	1.48	0.14
EPS	0.12	1.31	0.19

*Significant at 5% level

Table 10: Regression Values for Group-II

	Coefficients	t Stat	P-value
Intercept	6.47	4.33	0.00
NP Margin	0.07	1.67	0.10
ROA	0.81	2.77	0.01*
ROE	-0.39	-2.20	0.03*
ROCE	-0.03	-0.20	0.84
EPS	0.00	-0.02	0.98

*Significant at 5% level

The CSR outlay has significant impact on Net profit and ROA of Group I sector. The CSR outlay has significant impact on ROA and ROE for such sectors. It can be further observed that CSR spending has significant impact on ROA irrespective of sensitivity to the environment.

Conclusion

The Companies Act, 2013 made it obligatory for companies' to spend 2% of average net profits of 3 immediately preceding financial years on specified areas of social causes for the betterment of stakeholders and society in general. The present study examines the impact of CSR spending on financial parameters for six sectors, comprising of 30 companies' for the years 2014 through 2020. There is very high correlation between CSR spending and net profit for Oil and Gas, Chemicals and Consumer durable sectors. EPS is negatively correlated with CSR spending for all sectors except Consumer durable. The result is similar to that of Lin et.al, (2009), Mentor (2016) and Kaur and Singh (2021). The study concludes that environmentally sensitive sectors follow socially responsible initiatives having significant positive impact on financial performance. Firms' have to adopt CSR activities to meet their social goals along with profit minded pursuits. The COVID -19 pandemic has also forced firms' to realign their focus to meet the needs of all stakeholders of the society.

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