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Original Research Article

Impact of corporate social responsibility on profitability: A case study of oil and natural Gas corporation Ltd

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ABSTRACT

In present scenario the companies are not only concentrating on the profitability but also on the sustainability. The dual objective of the company does motivate to investigate the impact of Corporate Social Responsibility (CSR) on firm's profitability. A case study of Oil and Natural Gas Corporation Limited (ONGC) has been undertaken to examine the impact of CSR on profitability. The study is based on secondary data which were collected from the financial report of ONGC for the period of ten years from 2013-14 to 2022-23. Correlation and simple regression analysis have been employed to find out the impact of CSR on company's financial performance by taking in to consideration different variables such as the amount of CSR expenditure, return of equity, return on investment, profit after tax, earning per share and sales revenue. The finding of the study shows that there is no impact of CSR on firm's profitability, but there are positive moderate correlations between CSR and profitability indicators.

1. Introduction

Corporate Social Responsibility (CSR) is generally considered as an obligation that a company should follow in order to contribute towards a sustainable, cleaner and better society. Under CSR the companies integrate their resources with the social concern for the betterment of both the stakeholder as well as the society at large. The three bottom line of CSR considers people, planet and profit. It means targeting to achieve profit and then contributing a part of the profit for the development of the society. CSR not only helps in improving the environment but also helps in improving the human resources practices. By improving environment we mean, better utilization of natural resources, reduction in emission of hazardous substances, use of green power, encouraging green business, reducing wastage. Improving human resources management practices implies establishing policies that ensure the health and safety of all the employees, involvement of employees in business decisions in order to improve the work environment and providing training opportunities that will ultimately contribute towards achievement of organizational goal. From time to time various information and guidelines on CSR initiatives are provided by various national and international bodies such as UN Global Compact, OECD guidelines for Multinational enterprises, ILO, IFC and many others. Any company may if be holding, its subsidiary or foreign company can voluntarily participate in CSR business practices provided the company in its preceding financial year have net worth greater than 500 crore, turnover greater than 1000 crore and net profit above 5 crore. Companies Act, 2013 provide various provisions on non-compliance relating to CSR activities. It includes fines and penalty for non compliance on CSR spending, transferring and utilizing the unspent amount.

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2. ONGC and its CSR Practices

ONGC is India's largest Oil and Gas exploration and production Company, a public sector undertaking (PSU) of government of India under the administrateive Control of the Ministry of Petroleum and Natural Gas. ONGC has a long and cherished tradition of commendable initiatives, institutional programme and practices of CSR which have played a laudable role in the development of several underdeveloped regions of the country. ONGC is a leading Maharatna of the nation has set a benchmark continuously for the last two years by achieving 100% utilization of CSR budget. This reflects ONGC's commitment as a responsible corporate citizen of giving back to society in equal major. ONGC's leadership has ensured that as per the government's mandate, 33% of the CSR budget is spend on Swachh Bharat Projects. Further 65.90% in the last three years were implementing in the priority focus area like education and health care. With a business paradigm that is based on interconnected vision - of people's welfare, societal growth and environmental conservation, ONGC with its CSR activities in India continue to cater to the development needs across the following focus areas-

Figure 1: CSR initiative of ONGC Ltd.

3. Literature Review

Akinleye and Faustina (2017) investigated the impact of CSR spending and corporate financial performance of a sample of five multinational companies from Nigeria for a period of 2010-14. The result of the study showed that there is negative correlation between CSR amount spending and firm's profitability. Further it is found that there is no significant impact of CSR on financial performance (PAT).[1–4]

Azeez and Tunde (2016) have done a research on "Impact of CSR on firm's profitability: Evidence from Nigeria and Sierra Leone". They have selected five firms from each Country for their study and data were collected for a period of ten years i.e. from 2004-2013. This paper analyses the data by using trend analysis, Pearson product moment correlation coefficient and OLS method of multiple regression. This study concluded that financial performances of Nigerian companies are greatly affected by community involvement activity while disclosure of environmental cost lead to more profitability of Sierra Leone firms.[5–9]

Bhunia and Das (2015) in their study have examined the CSR activity of seven Maharatna companies and their impact on firm's profitability. They found that there is a positive impact of CSR on firm's profitability in case of GAIL but negative impact of CSR on rest of the companies namely, BHEL, CIL, IOCL, ONGC, NTPC and SAIL.[10–15]

Garai (2017) has conducted a study to examine the relationship between CSR and its impact on firm's profitability by taking the sample on Reliance Industries Limited for the period of six years. The result showed that there was no significant impact of CSR on profitability of the firm.

Kalam (2012) has conducted a research on impact of CSR on corporate profitability on some selected private commercial banks in Bangladesh. The findings of the study revealed that there are no relation among ROE, EPS and CSR and there is a significant negative relationship between CSR and ROA.

Machmuddah, Sari and Utomo(2020) have studied the effect of CSR on firm's profitability. They adopted path analysis to examine the impact of Corporate Social Responsibility by taking 109 companies which are listed on the Indonesia Stock Exchange (IDX). The result revealed that disclosure of CSR significantly affects the firm's value.

Maqbool and Zameer (2018) studied the relationship between CSR and financial performance of 28 commercial banks which are listed in Bombay Stock Exchange (BSE) for the period of ten years.This study revealed that CSR has positive impact on banks financial performance**.**

Mujahid and Abudullah (2014) has been conducted a comparative study between ten CSR rated companies and ten non CSR companies to know the impact of Corporate Social Responsibility on financial performance as well as shareholders wealth of the companies. ROI and ROE for financial performance and EPS and stock price for shareholders wealth are the financial indicators taken in to consideration for this study. The result revealed that there is a significant positive relationship between CSR, financial performance and shareholder wealth.

Razafindrambinina.et. al (2020) examined the relationship between CSR and profitability of the company. They categories companies into two groups i.e. high and low profit making companies. They applied multiple regressions to analyze the relationship between two variables. The result of this study showed that there is no significant relationship between CSR and high profitable companies where as there is no proper disclosure in the part of low profit making companies. The present paper strongly argues that disclosure of CSR mainly depends on the size of the firm.

Velmurugan and Das (2019) have conducted a research on mandatory CSR spending and its impact on profitability by analyzing NSE 200 companies. The data have been analyzed through regression. The findings of the study reveals that the amounts of CSR spent by NSE 200 companies are in increasing trends and also CSR activities had positive impact on the firm's profitability.

Akhand et al.(2024) have studied the role of Corporate Social Responsibility on financial performance of listed 30private commercial banks of Bangladesh. They have taken CSR expenditure and ROA, ROE, TobinQ, EPS, and Market Price of share as dependent and independent variables respectively. They have used OLS and GMM statistical technique to analyzed the data. The result of the studied revealed that CSR significantly depends on bank's ROE,TA,TR,EPS and ROA. However LR, TOBIN Q, SP, TE and PE are not significant determinant of CSR.

Ji et al. (2024) explored the impact of PSCSR and SSCSR on the f new venture's financial performance. They have conducted research on manufacturing industries of China. Factor analysis is used to analyses the data. Financial performance (Sales growth, ROA, CF, Profit growth, and ROI) and PCSR and SCSR are taken as DV and IV respectively. PCSR has positive impact on the financial performance whereas SCSR couldn't affect on FP.

Dade and Zuriat (2024) analysed the Corporate Social Responsibility expenditure disclosure and it's impact on FP of 12 Nigerian listed deposit money banks. OLS Regression Analysis is used to examined the impact of IV i.e. CSR disclosure (Employee Relation Disclosure Social donation and gifting and Local community relation disclosure on DV i.e. financial performance. Social donation and local community relation disclosure have positive impact whereas employee relations disclosure has negative impact on FP.

Abiolaand Festus (2024) have studied the effect of Corporate Social Responsibility on the FP of Nigerian listed Oil and Gas companies. They have collected data from Nigerian listed 11 Oil and Gas companies. Regression Analysis is used to analysed the panel data. Financial performance (ROA) and CSR expenditure on health and safety initiative, employees expenditure and employee relation expenditure are taken as dependent and independent variables respectively. HS and EE have significant impact on financial performance of the listed Oil and Gas companies.

4. Objective of the Study

The main objectives of the study are:

1. To investigate the impact of CSR on firm's profitability of ONGC Ltd.
2. To study the impact of CSR on sales revenue of ONGC Ltd.

5. Research Methodology

The present study is undertaken to determine the impact of CSR on the firm's profitability and to statistically test this objective five parameters has been taken from the annual report of ONGC Ltd. for a period of 10 years, i.e., from 2014-23. The period undertaken for data analyses was after the guidelines provided by Companies Act, 2013 regarding the implementation of CSR. The data have been analyzed through correlation and regression analysis. The data have been analyzed with the help of SPSS 22.0.

5.1. Data analysis and interpretation

Correlation, regression and ANOVA have been employed to statistically test the relationship between CSR and ROE, ROI, PAT, EPS and sales revenue. To test this, the following hypotheses have been formulated:

1. **$H_{0\ 1}$ -** There is no significant impact of CSR on ROE
2. **$H_{0\ 2}$**- There is no significant impact of CSR on ROI
3. **$H_{0\ 3}$**- There is no significant impact of CSR on PAT
4. **$H_{0\ 4}$**- There is no significant impact of CSR on EPS
5. **$H_{0\ 5}$**- There is no significant impact of CSR on sales revenue

5.2. Testing of hypothesis

Table 1: Correlation analysis of CSR and profitability parameters

Independent variable	Dependent variables	Results	Interpretation
CSR	ROE	0.018118	Very low degree of positive correlation
CSR	ROI	0.534914	Positive moderate correlation
CSR	PAT	0.324276	Positive moderate correlation
CSR	EPS	0.343843	Positive moderate correlation
CSR	Sales	0.873367	Positive high correlation

The above table indicates the value of R^2 which depicts that 1% change in CSR results 0.8% variation in ROE which is very low, 27.9% in ROI, 9.89% in PAT, 11.13% in EPS and significantly change in sales that is 75.86%.

$H_{0\ 1}$ - There is no significant impact of CSR on ROE

Table 2: Regression analysis of CSR on profitability parameters

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
ROE	0.089488	0.0080	-0.32266	100.3485
ROI	0.521441	0.2719	0.029201	85.97098
PAT	0.314608	0.0989	-0.20136	95.63663
EPS	0.333711	0.1113	-0.18485	94.9771
Sales	0.870988	0.7586	0.678161	7736.736

Table 3: ANOVA of the impact of CSR on return on equity (ROE)

Model	Degrees of freedom‘	Sum of Square	Mean Square	F	Significance
Regression	1	243.8712	243.8712	0.02421	0.88621
Residual	3	30209.45	10069.82		
Total	4	30453.32			

Table 4: ANOVA of the impact of CSR on return on investment(ROI)

Model	Sum of Square	Degrees of freedom	Mean Square	F	Significance
Regression	8280.291	1	8280.291	1.12031935	0.367532
Residual	22173.03	3	7391.01		
Total	30453.32	4			

Table 5: ANOVA of the impact of CSR on profit after Tax (PAT)

Model	Sum of Square	Degrees of freedom	Mean Square	F	Significance Level
Regression	3014.224	1	3014.22396	0.329554	0.606138
Residual	27439.1	3	9146.36544		
Total	30453.32	4			

Table 6: ANOVA of the impact of CSR on earning per share(EPS)

Model	Sum of Square	Degrees of freedom	Mean Square	F	Significance
Regression	3391.37149	1	3391.371	0.375956	0.58313
Residual	27061.9488	3	9020.65		
Total	30453.3203	4			

Table 7: ANOVA of the impact of CSR on sales revenue

Model	Sum of Square	Degrees of freedom	Mean Square	F	Significance
Regression	5643	1	564367533	9.428584	0.498109
Residual	1795	3	59857084.8		
Total	7438	4			

Now, to test the relationship between CSR and its impact on Return on Equity (ROE), first hypothesis $H_0 1$ i.e., there is no significant relationship between CSR expenditure and ROE, has been formulated.

The result of ANOVA displayed in the table indicates that the Sig. value (or p-value) is 0.8862 which is more than 0.05 at 5% level of significance. Therefore, $H_0 1$is accepted. This implies that there is no significant impact of CSR on Return on Equity (ROE).

H $_{0\ 2}$- There is no significant impact of CSR on ROI

To test the relationship between CSR and its impact on Return on Investment (ROI), second hypothesis H_{02} i.e., there is no significant relationship between CSR expenditure and ROI, has been formulated.

It is evident from the above table indicates that the Sig. value (or p-value) is 0.3675 which is more than 0.05 at 5% level of significance. This implies that there is no significant relationship between CSR and its impact on Return on Investment (ROI). Therefore, $H_0 2$ is accepted.

H $_{0\ 3}$- There is no significant impact of CSR on PAT

Now, to test the relationship between CSR and its impact on Profit after Tax (PAT) third hypothesis $H_0 3$ i.e., there is no significant relationship between CSR expenditure and PAT, has been formulated.

The result of ANOVA displayed in the table indicates that the Sig. value (or p-value) is 0.6061 which is more than 0.05 at 5% level of significance. This implies that there is no significant relationship between CSR and its impact on Profit after Tax (PAT). Therefore, $H_0$3is accepted.

H $_{0\ 4}$- There is no significant impact of CSR on EPS

Now, to test the relationship between CSR and its impact on Earnings per Share (EPS), fourth hypothesis $H_0$4 i.e., there is no significant relationship between CSR expenditure and EPS, has been formulated.

The result of ANOVA displayed in the table indicates that the Sig. value (or p-value) is 0.5831 which is more than 0.05 at 5% level of significance. This implies that there is no significant relationship between CSR and its impact on Earnings per Share (EPS). Therefore, $H_0$4is accepted.

H $_{0\ 5}$- There is no significant impact of CSR on sales revenue

Now, to test the relationship between CSR and its impact on sales revenue, fifth hypothesis $H_0$5 i.e., there is no significant relationship between CSR expenditure and sales revenue, has been formulated.

The result of ANOVA displayed in the table indicates that the Sig. Value (or p-value) is 0.498109 which is less than 0.05 at 5% level of significance. This implies that there is a significant relationship between CSR and its impact on sales revenue). Therefore, $H_0$4is rejected.

6. Findings of the Study

1. It is observed from the study that CSR and sales revenue is highly correlated that is 0.873
2. There is a significant impact of CSR on firm's sales revenue during the study period.
3. It is further observed from the study that there is no impact of CSR on firm's profitability indicators such as ROE, ROI, PAT, and EPS.

7. Conclusion

The prime objective of every business is to earn more and more profit. To survive in the competitive market it is necessary to earn long term profit. CSR play a vital role in a business organization to fulfill the twin objective of the organization that is CSR helps in increase profit and sales revenue. The study showed that the CSR has positive relation among revenue from operation and profit. The positive impact of CSR on sales shows that it affects on profitability because profitability position of a business depends upon increasing sales trends and also depends upon the efficiency of employees. Therefore, it is necessary to do CSR activity to sustain in the competitive business world.

8. Source of Funding

None.

9. Conflict of Interest

None.

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