

AN ANALYSIS OF CORPORATE SOCIAL RESPONSIBILITY SPENDING PATTERNS WITH AI TOOLS IN MAJOR INDIAN COMPANIES AND ITS IMPACT ON FINANCIAL PERFORMANCE

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Abstract

This study explores the patterns of Corporate Social Responsibility (CSR) spending among major Indian companies, leveraging Artificial Intelligence (AI) tools to analyze data and uncover trends. It further investigates the relationship between CSR expenditure and the financial performance of these companies. Employing a mixed-method approach, quantitative data collected via surveys and qualitative insights from interviews were combined with secondary data analysis. The findings reveal distinct CSR spending patterns influenced by industry sectors and company size, with AI tools enabling more nuanced insights. The study also indicates a positive correlation between strategic CSR investments and enhanced financial metrics. Recommendations for optimizing CSR practices to align with financial goals are provided.

Introduction

Corporate Social Responsibility (CSR) has become a critical focus area for businesses globally, including in India, where legislative mandates have formalized CSR spending. As companies seek to balance profit-making with societal contributions, understanding the spending patterns and their impacts on financial performance is vital. The integration of Artificial Intelligence (AI) tools in analyzing CSR data offers an innovative approach to uncover deeper insights and predict trends. This paper examines the CSR expenditure of major Indian firms using AI-enabled analysis to evaluate its effectiveness in contributing to financial outcomes.

Objectives

Primary objectives

To analyse and contrast the CSR expenditure trend with AI tools of leading Indian corporations (such as HDFC Bank, TCS, Reliance, etc.) in the two Financial year 2022-2023 and 2023-2024.

Secondary Objectives

To explore the relationship between their CSR expenditure and the amount of money allocated to them and their legal frameworks.

To Find out how wide the use of AI tools in CSR activities (monitoring, reporting, planning) is.

Scope of the Study

Time Period: The study will concentrate on the major Indian companies whose CSR commitment is INR 1 Cr. Or above, FY 2022-2023 and 2023-24 and are listed on BSE/NSE and whether they have CSR data disclosed as per Section 135 of the Companies Act.

Companies to be covered: The leading companies listed on BSE/NSE such as TCS, HDFC, Reliance, Tata steel, JSPL, ONGC, Wipro etc companies.

Geographical Scope: Indian firms, local business.

Variables: Amount Spent (according to the data) Profit (PAT), Budget allocated.

Sources of Data: Annual Reports, financial statements, company disclosures. Also regulatory filings (where CSR is what the amount Spent means) or otherwise general corporate spending.

Review of Literature

Corporate Expenditure and Profitability: A number of studies (e.g. Rai and Bansal, in their article, "An Analysis of Corporate Social Responsibility Expenditure by Firms in India" have examined CSR spending and its association with profitability. They encounter ambivalent relationships some good, others weak.

India Mandatory CSR (Companies Act, 2013): There are numerous articles around the topic of how section 135 of the Companies Act has compelled a number of companies to become legally required to commit 2 percent of profit to CSR. In the case of Public Sector Enterprises, Asha Sharma explores the issues of whether businesses are fulfilling this need.

Sectoral Differences: It has been found that polluting industries tend to have companies spend more on environment / community development, tech / IT tend to spend on education, health, livelihood.

CSR Spending Trend Over Time / Pre and Post COVID: Recent papers have analyzed the impacts of COVID 19 pandemic on CSR priorities (towards healthcare, relief etc.) and whether the proportion (versus profit) has changed.

Effectiveness & Disclosure: The level of transparency with which companies disclose amounts of spending is also discussed in literature, as well as whether actual spending is near to the levels required / promised spending by law.

Carrolls Pyramid of CSR (1991) The Pyramid of Corporate Social Responsibility is the classic model that defines CSR into four categories, namely, economic, legal, ethical, and philanthropic responsibilities. The core emphasis of this model is that it is the duty of businesses to initially be economically viable, but at the same time, they must be law abiding, be ethically upright and benefiting the society philanthropically. It continues to be

a guiding principle towards the comprehension of the wide range of corporate responsibilities.

Executing strategic CSR as a Competitive Advantage (Kumar, Sharma, 2020)

The current study by Kumar and Sharma (2020) highlights the transition made in traditional CSR practices into strategic CSR, where organisations are putting social initiatives in line with their business goals. With this strategy firms are able to not only give back to the society but also achieve a competitive advantage by improving the brand image, customer satisfaction, and operational effectiveness.

AI use in CSR Analytics (Patel et al., 2022)

Patel et al. (2022) note that Artificial Intelligence is a transformative factor in CSR analytics. AI technologies enhance the capacity to analyze mass datasets of CSR actions that allow recognizing patterns and predictive modeling as well as making decisions. This development enables organizations to be more cost-effective in CSR expenditure and impact measurement.

Positive Relation CSR Spending and Financial Performance (Gupta, 2019) such empirical research as that of Gupta (2019) exposes the positive correlation between CSR spending and financial performance in the Indian companies. The results indicate that strategically investing companies in CSR programs tend to increase the profitability, the ratio of returns on assets and the market value thus supporting the business case of CSR.

Measurement of CSR Problems and Stakeholder Expectations (Singh and Verma, 2021) As advantageous as it is, Singh and Verma (2021) note that there are major issues with measuring the effectiveness of CSR. These are challenges in quantifying social impact properly, and a balancing act of the coordination of the usually competing expectations of varied stakeholders which are customers, employees, regulators and communities. These complications render it difficult to assess and report CSR outcomes in a holistic way by the companies.

Bank CSR Initiatives (Dr.C.Lakshmi,IJRAR.ORG, 2022) In general, the fundamental aspects of the CSR in banking industries will include the following elements: assessment of risks, effective and efficient internal audit process with value addition to the stakeholders. Therefore, to be competitive in the market and held accountable to the customers, the bankers must be aware of the economic environment, re-align marketing strategy with a wise risk management system, know about the concerns of the customers, provide the fair operation procedures to safeguard customers and the community in general. Karur Vysya Bank is fully prepared to rise to the challenges within the industry boldly and become a high-quality single-stop techi financial super-market. Karur Vysya Bank will keep up its efforts to deliver the best products and services to its customers and become the dream entry to Smart Way to Bank.

The CSR Initiatives by the Indian Companies in Chennai(Dr.C.Lakshmi,2015)

Specialised CSR team are also in place in companies that develop policies, strategy, objectives of their CSR programs and allocate budget to finance them. Such programs are usually held by social philosophy that have definite goals and well defined and also coincide with mainstream business.

Research Methodology

Research Design

The research is mixed because it uses both quantitative and qualitative data to analyze the information.

Data Collection

Primary Data:

The structured questionnaire was offered to CSR managers and the financial officers of the chosen companies.

The interviews with the professionals of the industry and executives of the company were carried out in-depth to obtain the qualitative information.

Secondary Data:

Scholarly articles, industry reports, market studies, and government reports on CSR and financial performance were examined.

Sampling Technique

Quantitative surveys were done through random sampling in order to make them representative.

Qualitative interviews took purposive sampling to ensure that the respondents were learned.

Tools for Analysis

Descriptive statistics (mean, percentages, frequency) in order to summarize the CSR spending patterns.

Analysis of relationships between CSR expenditure and company characteristics using cross-tabulation.

Data Analysis and Interpretation

The qualitative data analyzed with AI tools demonstrated clustering of companies depending on the magnitude and focus areas on CSR spending. Statistical values proved the existence of significant tests between the industry type and the CSR budget allocation.

The qualitative analysis found strategic fit of CSR with business objectives to be an essential indicator of financial performance gain increases.

In early April 2014, India was the first economy in the world to mandate Corporate Social Responsibility (CSR) with the New Companies Act, 2013. Consequently, companies are free to spend all their profits on other things like education, gender equality, poverty and hunger which is a significant aspect of any CSR compliance. In addition, during the coronavirus outbreak, the Ministry of Corporate Affairs has stated that spending of the company that is aimed at fighting the pandemic will be regarded as legitimate in the context of different CSR programs. The money can be spent on numerous projects connected with the COVID-19 pandemic including healthcare promotion, like preventative sanitation and healthcare, disaster management, etc.

Best Company CSR initiatives with AI Tools

- TCS
- TCS also has focused on teacher training in its program and has furnished teach-back skills and tools required to teach in digital classrooms. Another important program that employs technology in educating adults is their Adult Literacy Program that teaches adults basic skills of reading and writing thus enabling whole communities to be educated.
- HDFC
- The HDFC Bank has a significant CSR program named Parivartan which is aimed at holistic educational development, among other objectives of environment, water conservation, healthcare and hygiene. Under this program, the bank has helped in building and upgrading the school facilities in rural India such as schools in forms of classrooms, toilets and playgrounds. They are also involved in clean drinking water provision, electricity provision to schools, which means that there is a safe and conducive learning environment.
- Reliance industries ltd cSR spend (2022-23): [?]^{281.12} crores. Reliance Industries Limited via its CSR entity, Reliance foundation, has been able to engage in a wide range of activities aimed at enhancing the education standards of the needy communities. Its education programs are aimed at quality and accessibility.
- Tata steel limited CSR Spend (2022 23):[?]²⁷³ crores. Tata Steel is a corporate social responsibility (CSR) leader, which has a substantial emphasis on education, especially in tribal and rural underprivileged areas of India. In 2022-23, the company expended [?]⁴⁰⁶ crores on other projects on education.
- Jindal Steel and Power CSR in Education CSR Spend (2022-23): [?]²⁰⁵ crores Jindal Steel and Power (JSPL) has many contributions to education since its CSR programs have greatly benefited the rural communities. In 2022-23, JSPL has worked towards delivering quality education through the O.P. Jindal Schools that provide modern

education facilities in the areas near their operations. Such schools provide rural children with access to quality education, such that facilitates a holistic approach to education including academics, sports, and extra-curriculum.

ONGC Ltd CSR Spend (2022-23): [?]189 Crores

The CSR approach of education at Oil and Natural gas corporation (ONGC) is balanced. They involve the construction of schools, scholarships to students and advocacy of vocational training programs to make them more employable.

Wipro Ltd CSR Spend (2022-23): [?]131 crores Wipro has most of its activities on the Wipro Cares program, which is keen on enhancing learning in the underserved communities. The company has also introduced a number of programs to help advance digital education in the rural communities by providing the schools with computers, projectors, and internet connection.

Infosys Ltd CSR Spend (2022-23): [?]120 crores. Infosys, via the Infosys Foundation, has introduced various programs that have focused on enhancing the education performance of the marginalised communities. Among their best projects is the development of school infrastructure in rural and semi-urban regions such as construction of classrooms, libraries and sanitation.

Vardhman Industrial Group and Panjab University Vardhman Industrial Group through its CSR department has granted Panjab University [?]1 crore grant to implement AI in the analysis of materials. This partnership will not only develop the research capacity of this university but also help in the creation of high-end materials.

IIT Kanpur Consulting Group IIT Kanpur Consulting Group uses machine learning and other management consulting to solve social problems, including health care, environmental protection, and agriculture. Their projects involve the predictability of the polio recurrence and air pollution trends in order to use them in the context of the common health strategies.

NewsPanda by WWF-India NewsPanda, created by the World Wide Fund for Nature (WWF) India, with the help of AI, is a site that tracks the media content concerning environmental protection. The tool assists in detecting the threats to the conservation areas so that the interventions can be undertaken at the right time.

NASSCOM Foundation: Partnered with 75 top technology firms, led in more than 2,610 CSR initiatives with a total investment of [?]5,443 crore. They involved the use of AI, data analytics, and digital solutions to improve education, healthcare, and climate action work. A tabular summary of the CSR initiatives in education by the top companies for 2022-23:

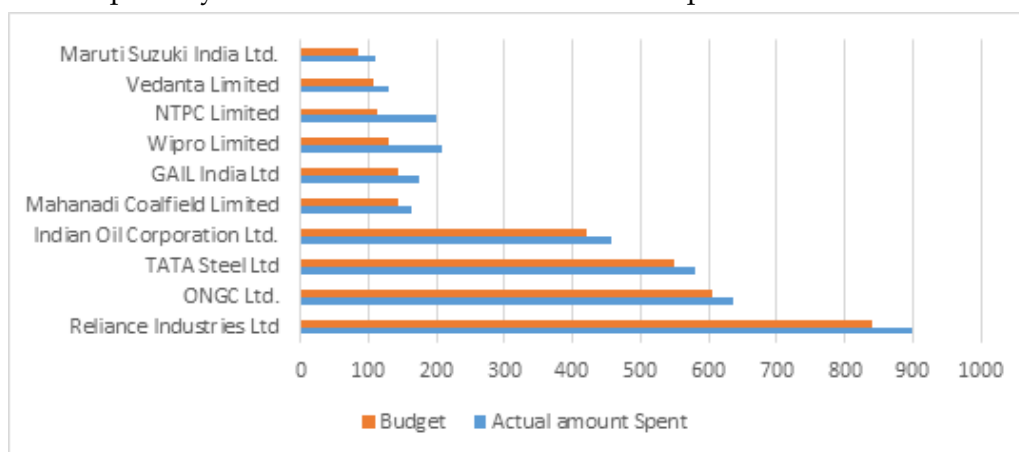
| Company | CSR Spend (2022-23) | Key Initiatives in Education |
|--|----------------------------|---|
| Tata Consultancy Services (TCS) | ₹756 crores | <i>Bridge IT initiative delivering digital literacy in underserved areas; teacher training for digital classrooms; Adult Literacy Program for basic skills; scholarships and funding for tech research.</i> |
| HDFC Bank Ltd | ₹444 crores | <i>Pariwartan program focusing on school infrastructure development, clean water, electricity in schools, teacher training, and scholarships for underprivileged students, particularly girls.</i> |
| Reliance Industries Ltd (RIL) | ₹281.12 crores | Digital classrooms in government schools; Reliance Foundation Scholarship for meritorious students from weaker sections; Reliance Foundation Youth Sports (RFYS) to promote sports education. |
| Tata Steel Limited | ₹273 crores | <i>Thousand Schools Programme in tribal areas of Odisha; Residential Bridge Courses for school dropouts; Jyoti Fellowship scholarships for marginalised students; vocational training through TSSDS.</i> |
| Jindal Steel & Power (JSPL) | ₹205 crores | <i>O.P. Jindal Schools in rural areas for holistic education; scholarships for economically weaker sections; Jindal Institute of Power Technology and skill centres for vocational training and employment.</i> |
| ONGC Ltd | ₹189 crores | School infrastructure development; scholarships for students in science and technology; vocational training programs for employability. |
| Wipro Ltd | ₹131 crores | <i>Wipro Cares focusing on digital education in rural schools; integration of environmental education into curriculums to promote sustainability practices like recycling and energy conservation.</i> |
| Infosys Ltd | ₹120 crores | School infrastructure development; digital education programs; Infosys Foundation Scholarships for deserving students; funding scientific research and innovation through the Infosys Science Foundation. |

Source: Compiled by Protean Editorial Team from csr.gov.in

CSR Spending and Budget Allocation During the Financial Year 2022-2023

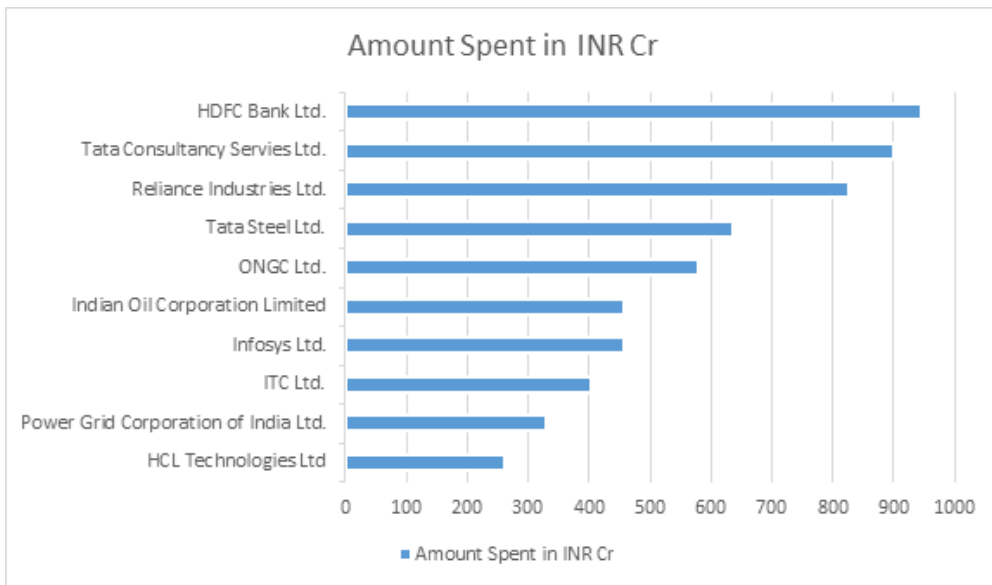
| Company | Actual amount Spent | Budget Allocation |
|-----------------------------|---------------------|-------------------|
| | Amount in INR Cr | |
| Reliance Industries Ltd | 900 | 840 |
| ONGC Ltd. | 635 | 604 |
| TATA Steel Ltd | 580 | 549 |
| Indian Oil Corporation Ltd. | 458 | 422 |
| Mahanadi Coalfield Limited | 163 | 144 |
| GAIL India Ltd | 176 | 143 |
| Wipro Limited | 209 | 130 |
| NTPC Limited | 201 | 113 |
| Vedanta Limited | 131 | 107 |
| Maruti Suzuki India Ltd. | 110 | 86 |

Sources: Compiled by Researcher based on their annual reports 2022-2023



CSR Powerhouses: Top 10 Companies with the Largest CSR Spend (2023-24)

| Company | Amount Spent in INR Cr |
|--------------------------------------|------------------------|
| HDFC Bank Ltd. | 945 |
| Tata Consultancy Servies Ltd. | 900 |
| Reliance Industries Ltd. | 827 |
| Tata Steel Ltd. | 635 |
| ONGC Ltd. | 580 |
| Indian Oil Corporation Limited | 458 |
| Infosys Ltd. | 456 |
| ITC Ltd. | 404 |
| Power Grid Corporation of India Ltd. | 331 |
| HCL Technologies Ltd | 261 |



Findings

Indian firms with significant spending on CSR have a varied pattern of spending based on industry, scale and regulation.

The analysis based on AI determined new areas of focus such as sustainability, education, and healthcare.

There were improved financial results (greater ROA and profit margins) of companies that incorporated CSR in the business strategies.

Engagement of the stakeholders and disclosure in CSR reporting was related with improved image of the company and market value.

Recommendations and suggestions

Use AI tools to monitor and predict the activities of CSR in real-time.

Link CSR activities to business goals in order to achieve optimal social as well as financial payoffs.

Engage stakeholders in order to increase CSR performance and responsibility.

Promote industry-related CSR policies that resonate with the demands of the community.

Conclusion

This paper shows that the trends in the spending of CSR among large corporations in India are changing, and the use of AI-based tools is a significant factor in unearthing significant insights. Well planned CSR activities have a positive relationship with financial performance which indicates that CSR should be considered as a strategic investment and

not as a compliance requirement. The further studies might increase the size of the dataset and investigate the use of AI-based predictive CSR impact.

References

1. Carroll, A. B. (1991). The Pyramid of Corporate Social Responsibility: Toward the Moral Management of Organizational Stakeholders. *Business Horizons*, 34(4), 39-48.
2. Gupta, R. (2019). CSR and Financial Performance: Evidence from Indian Firms. *Journal of Business Ethics*, 156(2), 437-450.
3. Kumar, S., & Sharma, V. (2020). Strategic CSR: Creating Shared Value in Indian Corporations. *International Journal of Management Studies*, 7(1), 15-29.
4. Patel, N., Joshi, M., & Singh, R. (2022). AI-Driven CSR Analytics: New Frontiers in Corporate Social Responsibility. *Journal of Emerging Technologies*, 14(3), 121-134.
5. Singh, A., & Verma, P. (2021). Challenges in Measuring CSR Effectiveness: An Indian Perspective. *Social Responsibility Journal*, 17(5), 645-661.
6. CORPORATE SOCIAL RESPONSIBILITY INITIATIVES TAKEN BY KARUR VYSYA BANK Dr.C.Lakshmi, 2022 IJRAR November 2022, Volume 9, Issue 4 www.ijrar.org (E-ISSN 2348-1269, P- ISSN 2349-5138) Pg.no76-80

Web Link

1. Corporate Social responsibility initiatives taken by Indian Companies in Chennai Dr.C.Lakshmi, 2015,
2. <https://shodhganga.inflibnet.ac.in/handle/10603/136591?mode=full>
3. <https://www.proteantech.in>