



A STUDY ON CSR CONTRIBUTIONS OF SELECT INDIAN AUTOMOBILE COMPANIES TOWARDS ENVIRONMENTAL SUSTAINABILITY IN THE POST-MANDATE PERIOD

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ABSTRACT

Ensuring and promoting environmental sustainability has appeared to be one of the priorities for countries around the globe to mitigate the detrimental consequences of climate change and promote sustainable development of the nations. As a part of the initiatives towards that direction, the Corporate Social Responsibility (CSR) clause has been incorporated in the Indian Companies Act, 2013 making CSR expenditures mandatory for Indian companies subject to fulfilment of some criteria. The study aims to analyse and compare the CSR expenditures of Nifty-constituent automobile companies in India towards environment sustainability by finding out if there exist any significant differences in the CSR contributions made towards environmental sustainability amongst those companies during the period of study from 2014-2015 to 2021-2022.

The study utilizes secondary data gathered from the CSR portal of the Ministry of Corporate Affairs (MCA), CSR Box website and annual reports of select companies for the study period. For analysing data on average actual and prescribed CSR contributions of sample companies, statistical tools like, mean, standard deviation, coefficient of variation, etc. have been computed along with visualization of data using bar diagrams and pie charts. Besides, one-way ANOVA has been performed to understand the statistical significance of differences amongst the sample companies on annual average actual and prescribed CSR expenditures during the study period. The study revealed that there exists a notable difference in the CSR expenditures towards environmental sustainability amongst the sample automobile companies during the period of study.

KEYWORDS: Corporate Social Responsibility (CSR), Environmental Sustainability, Companies Act 2013, CSR Expenditure.

I. INTRODUCTION

Corporate Social Responsibility (CSR) has become an integral part of business practice for every Indian company after the incorporation of CSR clause in the Companies Act 2013. The objective of inclusion of this clause was to encourage businesses to make positive contributions to society beyond their economic activities. Though many veteran Indian companies used to make substantial CSR expenditure voluntarily for a long time, it was made mandatory from 1st April 2014 for the Indian companies subject to fulfilment of some criteria. This shift in CSR from voluntary to mandatory marked a significant turning point for businesses to re-strategize their societal goals. In the present days highly competitive and dynamic business environment CSR has evolved beyond a legal obligation to use it as a strategic tool to uphold their societal and environmental commitments, enhance the corporate image, foster strong relationships with stakeholders in their operating environment and behave the companies as responsible corporate citizens.

As per section 135(1) of the new Companies Act, a company has to comply with CSR provision if the company satisfies any of the three criteria during the immediately preceding the financial year namely, net worth of rupees five hundred crore or more, turnover of rupees one thousand crore or more and net profit of rupees five crore or more.

Schedule VII of the Companies Act, 2013 lists out thirteen areas under which companies can make expenditure of their CSR funds aligning most of the Sustainable Development Goals (SDGs) as framed by the United Nations.

In the present study, focus has been given to understand the CSR initiatives of the select companies towards environmental sustainability in India as environmental sustainability has appeared, apart from addressing the global crises like climate shift and resource exhaustion, as a key driver for meeting stakeholder expectations, achieving and sustaining long-term existence and growth, building brand reputation with others making it a strategic initiative of the business entities.

II. LITERATURE REVIEW AND RESEARCH GAP

As CSR expenditure has become mandatory for the Indian companies through the enactment of New Companies Act in the year 2013, the studies on CSR practices of Indian companies in general and for specific sector are limited in number. For that, literature pertaining to area of the study both in pre and post mandate period has been reviewed in this section. Bhattacharya et al. (2009) discussed the importance of environmental initiatives in reducing emissions, implementing effective waste management systems, and promoting renewable energy



sources, etc. in Indian context. Carroll & Shabana (2010) highlighted that the automobile industry is a major contributor to environmental degradation and Indian automobile companies face challenges in adopting CSR practices that promote environmental sustainability. Arevalo & Aravind (2011) examined the Corporate Social Responsibility (CSR) practices of Indian firms and found that the stakeholder approach is predominantly favoured. Their research identified two primary drivers behind CSR engagement, the moral or caring motive and the strategic or profit-driven motive. Moreover, the study highlighted the challenges to effective CSR implementation with resource limitations and the complexity of execution being the most significant. Raj (2015) carried out a study on sustainable practices within the Indian automobile sector and the study revealed that varying emphases are given by the companies within the automobile industry with some companies prioritizing adoption of eco-friendly production processes while others directing their efforts towards community engagement and social welfare initiatives. Bansal and Jain (2016) argued the Indian companies need to spend more on CSR activities to improve their position in the market and create a positive reputation. This study shows that CSR is becoming increasingly important for businesses around the world to stay competitive and gain the trust of customers and the community. Kadambala and Chalmeti (2016) focused on exploring emerging trends in CSR in India. They identified healthcare, education, and environment as the main areas where companies are increasingly focusing their CSR activities. This study highlights the changing dynamics of CSR practices in India, stressing the growing significance of integrating social and environmental concerns with business operations. Sengupta et al. (2018) demonstrated the variety of CSR strategies employed by Indian automobile companies. Vij et al. (2019) carried out a study to assess the influence of CSR initiatives on sustainable environmental management. They utilized guidelines from the Global Reporting Initiative (GRI) and ISO 26000 standards to assess CSR practices. Their study provides insights into how companies implement CSR initiatives to promote environmental sustainability using internationally recognized frameworks for evaluation. Kumar & Patel (2020) discussed the importance of understanding several strategies adopted by companies, particularly those prioritizing eco-friendly production processes, community engagement and social welfare. The study suggested that there is a need for a comprehensive assessment of these diverse

approaches to evaluate the overall impact of CSR within the changing landscape of the automobile industry. Though different studies have made attempt to understand CSR practices of Indian companies and companies from different sectors under different broad categories, no study to the best of the knowledge, has been found in the existing literature which has addressed the CSR practices of Nifty-constituent Indian Automobile companies for the period considered in the present study.

III. OBJECTIVES OF THE STUDY

The major objectives of the study are as under:

1. To analyse the annual CSR expenditures and cumulative annual CSR expenditures of sample companies towards environmental sustainability during the period of study.
2. To investigate the average CSR spending of sample companies towards environmental sustainability.
3. To examine the percentage of annual CSR expenditure towards environmental sustainability out of total CSR spending of the sample companies during the period of the study.
4. To understand whether there exists any difference amongst the CSR expenditure of the sample companies towards environmental sustainability of the sample companies during the period of the study.

IV. RESEARCH METHODOLOGY

As, CSR clause has been incorporated for the first time in the Companies Act 2013, and adopted with effect from 1st April 2014, and eight-year period starting from financial year 2014-2015 has been considered for the study. Data pertaining to CSR activity-5 which represents environmental sustainability have been collected from different sources namely, websites and annual reports of the sample companies, national CSR portal, etc. For analysing the CSR performances of sample companies with respect to environmental sustainability, descriptive statistics have been used along with a graphical representation of the dataset. Furthermore, a one-way ANOVA has been employed using MS-Excel software to examine significant differences in CSR contribution towards environmental sustainability of the selected automobile companies relative to their total CSR expenditures.

V. DATA ANALYSIS

The following table lists the companies selected for the study.

Table 1: List of sample companies

Industry	Company name
Automobile	Bajaj Auto
	Eicher Motors
	Hero MotoCorp
	Mahindra and Mahindra
	Maruti Suzuki
	Tata Motors



Table 2: Average prescribed CSR and average actual CSR spending of Automobile companies in eight years

Company Name	Average prescribed CSR amount (In crores)	Average actual CSR amount (In crores)	Difference (Prescribed CSR-Actual CSR) (In crores)
Bajaj Auto	106.39	94.70	11.69
Eicher Motors	26.84	26.92	-0.08
Hero MotoCorp	79.78	81.09	-1.31
Mahindra and Mahindra	92.82	92.93	-0.11
Maruti Suzuki	110.34	111.43	-1.09
Tata Motors	3.00	16.46	-13.46

Source: Authors' calculation

Table 2 and Figure 4 represent the average prescribed CSR, average actual CSR and the difference between the prescribed and actual CSR of the select automobile companies. Bajaj Auto

is the only company that has spent less than the prescribed CSR. All five companies have spent more than the prescribed CSR.

Table 3: Annual CSR spending of sample automobile companies towards environmental sustainability in eight years

	Bajaj Auto	Eicher Motors	Hero MotoCorp	Mahindra & Mahindra	Maruti Suzuki	Tata Motors
2014-15	0.18	0.00	0.00	5.18	0.00	0.00
2015-16	0.00	0.00	3.40	6.75	0.00	1.15
2016-17	32.30	0.00	3.29	5.13	0.00	0.00
2017-18	67.70	0.09	18.42	7.78	0.00	1.30
2018-19	20.40	1.28	26.44	9.52	0.00	1.24
2019-20	5.40	1.03	22.88	11.84	0.00	1.19
2020-21	0.00	0.00	6.09	26.12	8.91	1.60
2021-22	4.00	0.20	10.80	7.92	0.00	0.00
Total	129.98	2.60	91.32	80.24	8.91	6.48
Mean	16.24	0.32	11.41	10.03	1.11	0.81
S.D.	23.83	0.52	9.97	6.87	3.15	0.68

(Source: Authors' calculation)

Table 3 and Figure 5 demonstrate the annual CSR spending toward environmental sustainability by the sampled automobile companies over eight years.

The Bajaj Auto's annual CSR allocation fluctuated over time, reaching a peak in 2017-18 and showing fluctuations in subsequent years. The total spending after years is rupees 129.98 crores reflecting the company's dynamic approach to environmental sustainability initiatives. Eicher Motors started with minimal spending in the first few years but showed a noticeable increase in the fourth and fifth years. The overall trend suggests a gradual commitment of the company to environmental sustainability totalling rupees 2.60 crores over eight years. Hero MotoCorp demonstrated a rising trend in annual CSR spending toward environmental sustainability with significant peaks in the fourth, fifth and seventh years. The overall spending reached rupees 91.32 crores showcasing a proactive commitment over the study period. Mahindra and

Mahindra's annual CSR spending showcased variations with a notable increase in the seventh year. The overall trend indicates a commitment to environmental sustainability totaling rupees 80.24 crores over the eight years. Maruti Suzuki displayed a unique trend with no spending in the initial six years, followed by a substantial contribution of rupees 8.91 crores in 2020-21. The absence of spending in the seventh and eighth years suggests a specific focus on environmental initiatives during the study period. Tata Motors exhibited a fluctuating trend in annual CSR spending towards environmental sustainability. The total spending over the past eight years was rupees 6.48 crores reflecting a variable but ongoing commitment to environmental initiatives.

The trend analysis bar diagram visually emphasizes the varying CSR spending patterns among the companies providing a clear overview of their commitment to environmental sustainability throughout the study.

Table 4: Total CSR expenditure and percentage contribution toward environmental sustainability

Company name	Actual CSR (In crores)	CSR Activity 5 Environmental sustainability (In crores)	% Spent on environmental sustainability over actual CSR
Bajaj Auto	757.58	129.98	17%
Eicher Motors	215.32	2.60	1%
Hero MotoCorp	648.75	91.32	14%
Mahindra and Mahindra	743.42	80.24	11%
Maruti Suzuki	891.47	8.91	1%
Tata Motors	131.65	6.48	5%

Source: Authors' calculation



The findings from Table 4 and Figure 1 reveal that among the six companies, Maruti Suzuki demonstrates the highest commitment to CSR with spending of rupees 891.47 crores over the eight-year followed by Bajaj Auto and Mahindra & Mahindra with rupees 757.58 crores and 743.42 crores respectively. Hero MotoCorp allocated rupees 648.75 crores towards CSR while Eicher Motors contributed rupees 215.32 crores. Notably, TATA Motors had the lowest actual CSR spending over the eight years totalling to rupees 131.65 crores.

Figure 2 provides a visual representation of CSR contributions toward environmental sustainability by the sample automobile companies over eight years. Bajaj Auto is the top contributor spending rupees 129.98 crores followed by Hero MotoCorp with rupees 91.32 crores, Mahindra and Mahindra with 80.24

crores, Maruti Suzuki with rupees 8.91 crores, Tata Motors with rupees 6.48 crores, and Eicher Motors had the lowest annual CSR spending of rupees 2.60 crores.

Figure 3 illustrates the percentage spending on environmental sustainability on the total actual CSR over the eight years of study. Bajaj Auto with the highest percentage allocates 17% of its total actual CSR towards environmental sustainability. Hero MotoCorp follows closely with 14%, indicating a substantial commitment to environmental initiatives. Tata Motors allocated 5%, while Eicher Motors and Maruti Suzuki had the least spending at 1%. These results highlight variations in the companies' priorities, emphasizing Bajaj Auto and Hero MotoCorp's notable focus on environmental sustainability within their overall CSR initiatives.

Table 4: CSR Contribution toward Environmental Sustainability over the Study Period

Company Name	Bajaj Auto	Eicher Motors	Hero MotoCorp	Mahindra and Mahindra	Maruti Suzuki	Tata Motors
Years Spent	6 years	4 years	7 years	8 years	1 year	5 years

Source: Authors' calculation

Table 4 reveals that out of all the six selected companies, Mahindra & Mahindra is the only company that has consistently contributed towards environmental sustainability in its CSR initiatives for eight consecutive years. Hero MotoCorp follows closely contributing for 7 consecutive years from 2015-2016 to 2021-2022. In Contrast, the remaining four companies including Bajaj Auto, Tata Motors, Eicher Motors

and Maruti Suzuki did not exhibit consistent contributions. Maruti Suzuki had the least consistent involvement, contributing for only one year. These highlight varying levels of commitment among the selected companies, emphasizing the significance of sustained engagement in environmental CSR initiatives.

Table-5: One-Way ANOVA Test

Source of Variation	Sum of Squares	Difference	Mean Squares	F-value	P-value	F critical
Between Groups	2071.29	5	414.25	3.23	0.01	2.47
Within Groups	4603.38	36	127.87			
Total	6674.67	41				

Source: Authors' calculation

To find whether there is any difference in the CSR contribution towards environmental sustainability amongst selected six automobile companies one-way ANOVA has been performed and the results have been presented in Table-5.

From Table-5, it is evident that the p-value is 0.01. Hence, we reject the null hypothesis and accept the alternative hypothesis implying that there exists a significant difference in the CSR expenditures toward environmental sustainability amongst the sample automobile companies during the period of study.

VI. CONCLUSION

The outcomes of the study demonstrate that the CSR practices of sample companies towards environmental sustainability vary across the companies with companies like Bajaj Auto, Hero MotoCorp, and Mahindra & Mahindra making significant

contributions towards environmental sustainability followed by Maruti Suzuki, Tata Motors, and Eicher Motors. Among these, Mahindra & Mahindra is the only company that has contributed consistently towards environmental sustainability during the eight years. However, the percentage of CSR spending allocated to environmental sustainability is lower across all the companies, with Bajaj Auto allocating the highest at 17%, and Eicher Motors and Maruti Suzuki allocating the lowest at just 1%. Thus, the findings highlight the need for the formulation and implantation of required CSR strategies that will focus on making adequate expenditure toward environmental sustainability in line with sustainable development goals as framed by the United Nations. Additionally, the study reveals that there exists a notable difference in the CSR spending of the sample companies towards environmental sustainability during the period of the study.

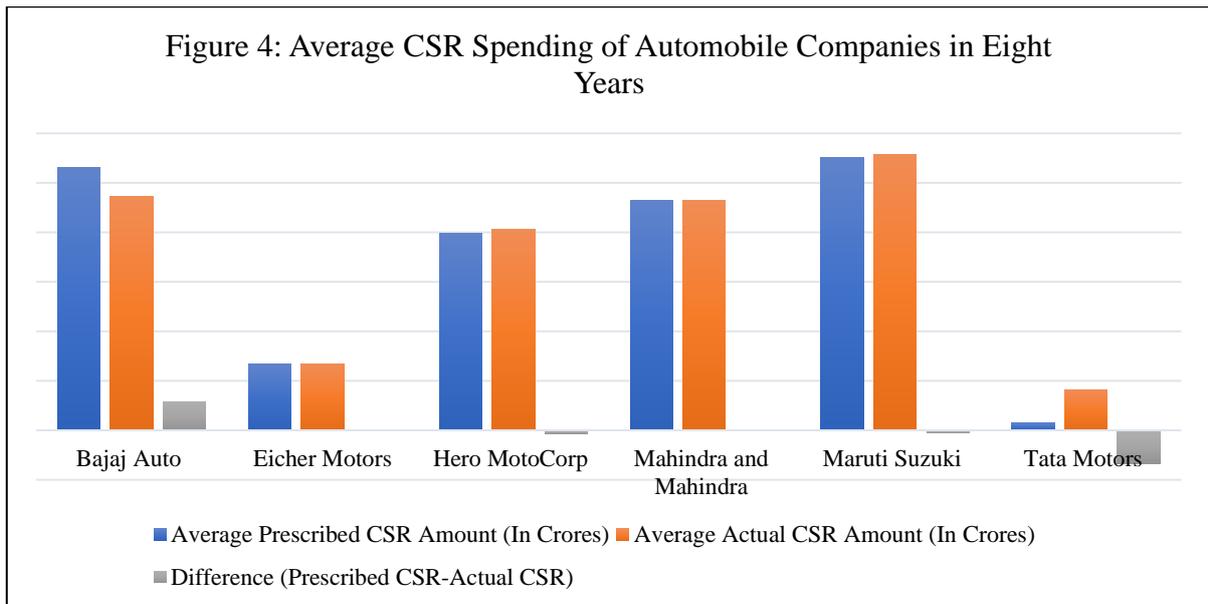
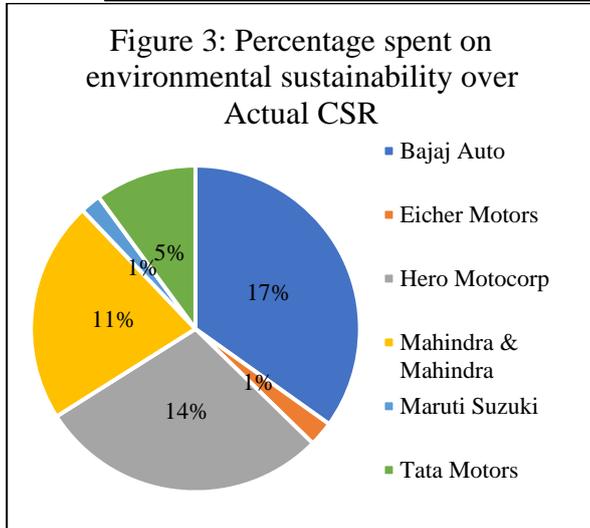
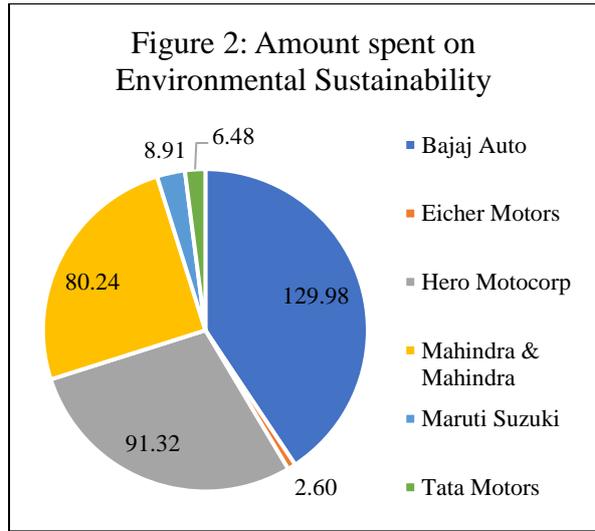
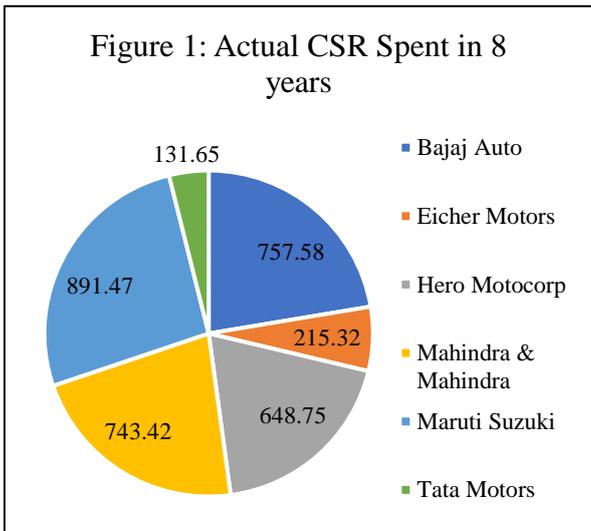
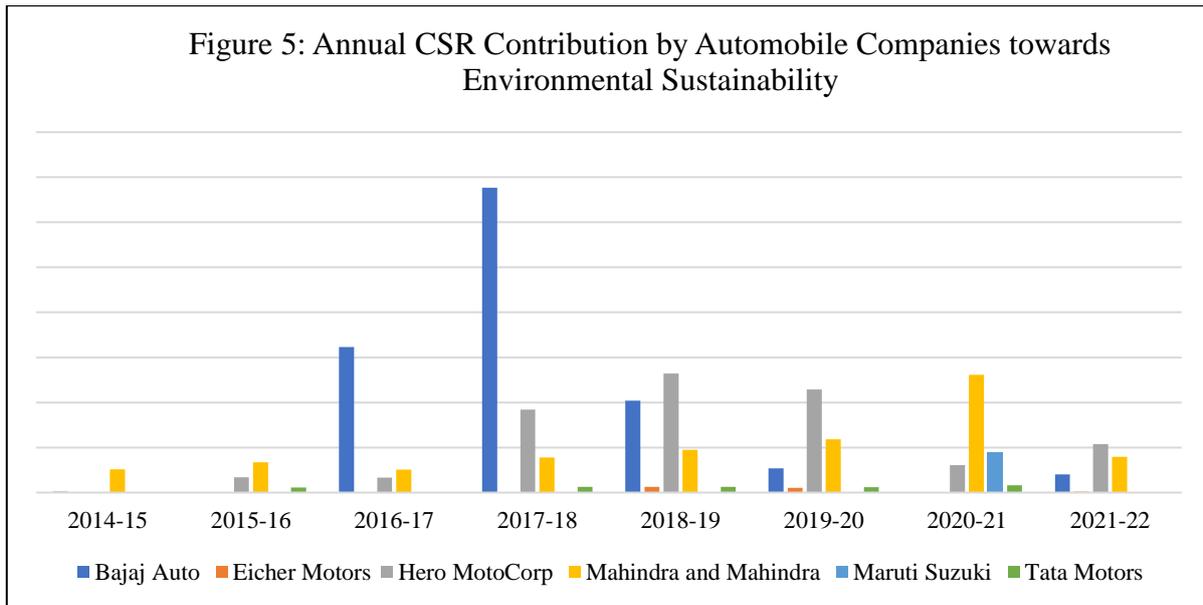




Figure 5: Annual CSR Contribution by Automobile Companies towards Environmental Sustainability



Source: Authors' calculation

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