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## Corporate social responsibility: An analysis of CSR spending by Indian automobile companies

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### Abstract

Corporate Social Responsibility is the need of the hour for every enterprise in today's era. Companies that spend more on CSR activities as required by law gain more attention from all stakeholders. The aim of this paper is to investigate the CSR spending of the Indian automobile industry through the analysis of five Indian automobile companies over a period of four years from 2016-17 to 2019-20 with respect to the Companies Act 2013, which requires certain categories of companies to spend at least 2% of their average net profit made in the three immediately preceding financial years in pursuance of their CSR Policy. To examine the data collected from different sources, such as the annual reports and CSR reports of sample automobile companies, and to test the hypotheses, several statistical tools were used in the study, such as mean, ranking, t-test and paired t-test. The result of the study showed that the majority of the sample automobile companies are spending more than the amount prescribed by law on CSR activities. Though the difference is not statistically significant. Furthermore, the study's findings reveal a rising trend in corporate CSR spending, resulting in greater shareholder value, improved customer satisfaction, and the potential for sustainable development.

**Keywords:** Actual CSR spending, companies act, 2013 (Section 135), prescribed CSR, ranking

### Introduction

Corporate Social Responsibility is not a new concept in India. Many businesses like Wipro, Infosys, NIIT have contributed to promoting CSR by setting up charitable trusts, NGOs, schools, hospitals for society at large. Formerly, the term "corporate social responsibility" was used synonymously with philanthropy, which was used by many business tycoons to enlarge the image of their brand. According to traditional beliefs, a company's sole responsibility is to make a profit, but that definition is no longer valid in modern times, when people are more aware and willing to contribute in any way they can to sustainable development. Therefore, a company must satisfy the needs of all stakeholders directly or indirectly related to a company. A company is part of society and companies take all their resources from society, such as natural resources, labor, capital, etc. There are many examples where a company fails to be socially responsible, or we can say, fails to satisfy the needs of all stakeholders and collapses, such as Satyam Computers Services Limited (India), Arthur Anderson (USA), Enron Corporation (USA), and Kingfisher Airlines (India) and many more. As a result, it is mandatory for a company to share its profits with society, and today every company does so in various ways, such as: dividends to shareholders, interest to loan providers, salaries to employees, taxes to the government, providing good quality goods and services at fair prices to customers, purchasing raw materials at a fair price, and timely payment to suppliers, etc. Nevertheless, companies' motive should not just revolve around a vicious circle of direct stakeholders; they should also spend to strengthen the weaker sections of society, improvising techniques for sustainable development, strategizing to improve employability levels, and educating people about social causes like: dowry, domestic violence, sustainable management, urban waste management, etc.

As a result of globalization, companies are expected to be more responsible, more open and be prepared to report publicly on their CSR policies. In many studies, it is found that investors want to invest in firms that accept the challenges of our society and spend more on social causes.

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In a survey conducted by Environics International, it was shown that more than a quarter of share-owning Americans took into account ethical considerations when buying and selling shares<sup>[4]</sup>. In a study by Bag *et al.* (2020)<sup>[3]</sup> found the significant impact of CSR on the financial performance of a firm. In another study, Loureiro *et al.* (2012)<sup>[7]</sup> investigated the role of consumer satisfaction in CSR initiatives, and the results showed that buyers' inclination was more towards environmental performance activities in comparison to labor practices and community development. The amount spent on CSR should not be treated as expenditure. Instead, the term "investment in CSR" should be used, because it provides endless benefits to a company in the long run, such as, good public image, increasing the competitiveness of a firm, easy access to capital, avoid interference of government and society, motivating and retaining employees, risk management, reducing risks, decreasing fraud in firms, helping in achieving the organization's long-term objectives, improving financial performance in the long run, helping to minimize ecological damage, increase sales and customer loyalty, which ultimately leads to sustainable development of firms. Some studies have found that consumers are more aware of their rights and the CSR activities of companies, and they also understand that those companies who are benefiting society are loyal towards their country and customers. This influences their purchase behavior and they prefer to buy the products of socially responsible firms. India is the first country in the world to adopt provisions on corporate social responsibility under the Companies Act 2013, Section 135. As per the act every company has

- 1) A net worth of at least INR 500 crores; or
- 2) Turnover of INR 1000 crores or more; or
- 3) A net profit of INR 5 crores or more,

should spend at least two percent of the average net profits made by the company during the three immediately previous financial years on its corporate social responsibility activities. If the company fails to spend such an amount on CSR activities, the Board of Directors has to report the reasons for not spending such an amount in the Boards' Report. Also, if a company violates any of the provisions of the CSR, every defaulting company shall be punished with a fine ranging from 50,000 rupees to 25 lakh rupees, and any defaulting officer of the company shall be punished with imprisonment for up to 3 years or a fine ranging from 50,000 rupees to 5 lakh rupees, or both[i]. The CSR activities in India are mainly focused on the following areas: 1) eliminating extreme hunger and poverty; 2) promoting education; 3) encouraging gender equality; 4) women's empowerment; 5) women-health and child care; 5) environment protection and sustainable development; 6) rural and slum development projects.

The automobile industry is the fourth largest industry in India and the sixth largest in the world. The automotive industry contributes around 7.1 percent of India's GDP (Gross Domestic Product). In India, the automobile industry is gigantic in terms of revenue generation. However, the automobile sector is also profoundly responsible for environmental breakdowns such as: air pollution, noise pollution, and the depletion of natural resources, all of which have a negative impact on human health and society. So, it is the responsibility of automobile companies to move toward socially responsible actions in order to achieve

sustainable development of themselves and society, and they should spend more than is required by law on CSR activities to protect the environment and society at large. The present study is an attempt to analyze automobile companies' spending on CSR initiatives in comparison to what is required by law.

## Review of Literature

The present study reviewed various previous studies in order to better understand corporate CSR initiatives and to identify research gaps in the field of CSR. Some of the most significant research on corporate social responsibility, CSR expenditure, and the influence of CSR spending on consumer purchasing behavior are reviewed in this section. Shin *et al.* (2015)<sup>[12]</sup> determined whether the involvement of the government through a law was really desirable or counterproductive. Findings revealed that Indian companies are most likely to invest in CSR initiatives, financial contributions, and companies' proper operating systems to conduct CSR activities.

Shanmugam *et al.* (2017)<sup>[10]</sup> explore the present status of CSR spending mandated by the Companies Act, 2013 (Section 135) of NSE Nifty 200 companies by using simple percentage analysis. They found that most of the selected companies are adhering to the CSR policy of allocating 2% of their average three years' pretax profits. The study tries to put forward the need for the compulsory spending of the allocated CSR amount and also the proportionate distribution of CSR amount and activities among all union territories and states without sticking to the local areas where they operate. In another study, Prabhavathi *et al.* (2017)<sup>[8]</sup> examined the CSR spending of forty-one Indian banks and discovered that the Indian banking sector increased its CSR spending following the Companies Act of 2013. Eighteen banks out of forty-one Indian banks did not disclose CSR spending in 2013, which has decreased to fourteen banks in 2016. That shows the transparency in CSR spending. Sharma *et al.* (2016)<sup>[11]</sup> analyzed CSR activities of 25 companies in India. The study concludes that thirteen out of twenty five firms have spent 2% or more than 2% of profits. Finally, they concluded that even though CSR spending has become mandatory as per the Companies Act 2013 (Section 135), all the sample companies are not fulfilling the criteria. In some cases, companies don't spend one percent of their profit on CSR. Rai *et al.* (2014)<sup>[9]</sup> found that, the last few years have shown an improvement in CSR expenditure by firms. This may be attributed to the need of companies to project them as socially accountable. The CSR expenditure of the companies is affected by the sector to which they belong. Companies that belong to polluting industries spend more on activities associated with the environment, while the CSR expenditure of companies that belong to the iron and steel and power sectors spend more on local community development because it might prevent future boycotts and protest movements. Sookcharoen *et al.* (2018)<sup>[13]</sup> found CSR expenditure by firms before and after the enforcement of the Companies Act 2013. It is found that the types and environmental factors help in determining the CSR expenditure by companies.

Researchers (Vethirajan *et al.* (2019)<sup>[17]</sup> found that the consumers of FMCG products have adequate information about the legal, economic, and ethical responsibility of the CSR activities of FMCG companies. The knowledge of the buyer about the CSR activities of FMCG companies influences their behavior and they favor specific FMCG

firms to buy the personal care product. Consumers prefer ethical, responsible FMCG companies to buy personal care products. They give preference to such FMCG firms that are more involved in community development. The knowledge of consumers of CSR practices of FMCG firms is likely to give preference to such FMCG brands for the purchase of personal care products that are more involved in CSR activities such as environmental protection, brand loyalty, and quality products at a fair price. Valentini *et al.* (2018)<sup>[6]</sup> found a complex ethics dilemma within the context of CSR and CS. Six major stakeholders were identified who are affected by Volkswagen's behavior: shareholders, the U.S. environmental protection agency, European institutions, customers, investors, and society. Jain *et al.* (2020)<sup>[6]</sup> found the impact of innovation spending on CSR decisions and how is the relationship between these factors affected by state ownership? The study used firm-level published data from 2 years after the mandatory CSR provisions of the Companies Act 2013. The results found a positive relationship between innovation spending and CSR decisions.

An attention-grabbing fact, realized after reviewing the literature in both the Indian and international contexts, is that there are very few studies which concentrate on CSR spending and even fewer studies which are in the framework of the Indian automobile industry. There are many studies which focus on impact of CSR on firm performance, profitability, innovation, and sustainable development. Nonetheless, there are only a limited number of studies published from the perspective of CSR spending, with special context to the law enforcement of Section-135 of the Companies Act 2013. The apparent lack of CSR spending studies in regards to the relevance of the automotive industry is pretty evident. Despite being the fourth largest industry in the world, there is a huge research gap in the area of the Indian automobile industry. The lack of research in this area provides researchers with an opportunity to explore CSR spending in this industry. This sector is very lucrative to study since there will be humongous opportunities to explore the contribution of automobile companies' CSR spending to give benefits to society and the environment at large.

Based on the opinions existing in the literature review and after analyzing the research gap, we developed the following objectives of the study:

1. To study the Indian government's policies governing CSR;
2. To analyze the CSR spending of the Indian automobile industry;
3. To assign a ranking to the sample automobile companies based on their CSR spending;
4. To compare the actual CSR spending with prescribed CSR of automobile companies.

With the help of the following hypotheses, we are trying to fulfill the objectives of the study.

**H<sub>0</sub>1:** There is no difference between actual spending on CSR and prescribed CSR in the Indian Automobile Industry.

**H<sub>0</sub>1.a** There is no difference between actual spending on CSR and prescribed CSR in the Indian Automobile Industry for the FY 2016-17.

**H<sub>0</sub>1.b:** There is no difference between actual spending on CSR and prescribed CSR in the Indian Automobile Industry for the FY 2017-18.

**H<sub>0</sub>1.c:** There is no difference between actual spending on CSR and prescribed CSR in the Indian Automobile Industry for the FY 2018-19.

**H<sub>0</sub>1.d:** There is no difference between actual spending on CSR and prescribed CSR in the Indian Automobile Industry for the FY 2019-20.

**H<sub>0</sub>2:** There is no improvement in CSR spending over a period of time in the Indian Automobile Industry.

## Methods

As previously stated in the review of literature section, research on the Indian automobile sector in terms of CSR spending are insignificant. As a result, it is critical to investigate automobile companies' sense of responsibility and sensitivity to CSR activities and spending. It is obvious to restrict the study to the Indian automobile sector in the belief that it will provide factual, unbiased data and also expose different CSR practices followed by these companies. We chose the automobile industry for the purpose of study, since this sector has a direct connection with every individual and is essentially responsible for keeping air and sound pollution at a level that should not have such a negative impact on the environment. The study is based on secondary data. Various statistical methods, such as mean, rank, and paired t-test, were used in the study to examine the hypotheses. Tables have been used to show the CSR spending by companies over the years. The data collection period of the study is four years, from 2016-17 to 2019-20, from different sources such as companies' annual reports, companies' CSR reports, newsletters available through electronic media, records and surveys published by official agencies. We choosed four years for the purpose of study because it will provide a true and fair picture of the company's spending on CSR. The present study covers 5 listed companies of the automobile industry in India. Sample companies came in top 200 companies, ranking based on seven parameters given by ET 500 (2019)<sup>[5]</sup>.

## Results and Discussion

An attempt has been made to examine the CSR spending of the five Indian automobile companies individually over a period of four years from 2016-17 to 2019-20 with respect to Section 135 of the Companies Act 2013, which has made it mandatory for certain categories of companies to spend on CSR. The analysis is mainly based on companies' spending on CSR as compared to what is prescribed by law, i.e. at least two percent of their average net profit of the three immediately previous financial years. To test the first sub-hypotheses, 't' test is used, and a paired t test is used to test the second hypothesis.

**H<sub>0</sub>1.a:** There is no difference between actual spending on CSR and prescribed CSR in the Indian Automobile Industry for the FY 2016-17.

Actual CSR spending, prescribed CSR, difference between actual spending and prescribed CSR and ranking (given on the basis of company's spending on CSR more than prescribed by law) for FY 2016-17 are shown in table 1.

**Table 1: CSR Spending for the FY 2016-17 (in Crore)**

Serial No.	Company Name	Actual CSR Spending	Prescribed CSR	Difference between Actual spending on CSR and Prescribed CSR	Ranking given on the basis of company's spending on CSR more than prescribed by Law
1	Tata Motors Ltd.	25.94	Nil	25.94	1
2	Mahindra & Mahindra Ltd.	83.30	83.30	0	5
3	Maruti Suzuki India Ltd.	89.45	89.24	0.21	3
4	Hero MotoCorp Ltd.	85.14	70.62	14.52	2
5	Ashok Leyland Ltd.	8.33	8.14	0.19	4
Total		292.16	251.3	40.86	

(Source: Annual Report and CSR Report of Sample Companies)

From Table 1, it can be seen that the actual total spending on CSR in FY 2016-17 was 292.16 crores, compared to the mandatory CSR of Rs. 251.3 crores. Actual spending on CSR by sample companies was more than or equal to prescribed CSR in FY 2016-17. Sample companies spent 40.86 crores more than the prescribed CSR in FY 2016-17. It shows companies are fulfilling the provisions of the Companies Act 2013 regarding CSR with due seriousness in

FY 2016-17. The highest ranking (on the basis of a company's spending on CSR more than prescribed by law) is given to Tata Motors Ltd. and the lowest to Mahindra & Mahindra Ltd. Maruti Suzuki India Ltd. has spent highest on CSR. It is 89.45 crores. We applied 't' test to check whether the difference between actual spending on CSR and prescribed CSR in the Indian automobile industry for FY 2016-17 is statistically significant or not.

'T' Test summary		
	Actual CSR Spending (2016-17)	Prescribed CSR (2016-17)
Mean	58.432	50.26
Variance	1464.9479	1831.4434
Standard Deviation	38.2746	42.7954
N	5	5
Degree of Freedom	8	

Critical value of t is 2.306 @ 5% level of significance (two tailed, degree of freedom =8).

Calculated value of t is 1.5585.

#### Interpretation of result

Since the critical value of t 2.306 is more than the calculated value of t 1.5585. Therefore, the first sub null hypothesis is accepted at a 95% level of confidence and it can be concluded that the difference between actual spending on CSR and prescribed CSR in the Indian Automobile Industry for FY 2016-17 is not statistically significant.

**H<sub>01.b</sub>:** There is no difference between actual spending on CSR and prescribed CSR in the Indian Automobile Industry for the FY 2017-18.

Actual CSR spending, prescribed CSR, difference between actual spending and prescribed CSR and ranking (given on the basis of company's spending on CSR more than prescribed by law) for FY 2017-18 are shown in Table 2.

**Table 2: CSR Spending for the FY 2017-18 (in Crore)**

Serial No.	Company Name	Actual CSR Spending	Prescribed CSR	Difference between Actual Spending on CSR and Prescribed CSR	Ranking given on the basis of company spending on CSR more than prescribed by law
1	Tata Motors Ltd.	21.43	Nil	21.43	1
2	Mahindra & Mahindra Ltd.	81.97	81.27	0.7	4
3	Maruti Suzuki India Ltd.	125.08	120.83	4.25	2
4	Hero Moto Corp Ltd.	84.34	82.60	1.74	3
5	Ashok Leyland Ltd.	15.67	23.66	-7.99	5
Total		328.49	308.36	20.13	

(Source: Annual Report and CSR Report of Sample Companies)

From table 2, it can be observed that total actual spending on CSR in FY 2017-18 was 328.49 crores, compared to the prescribed CSR of Rs. 308.36 crores. The majority of the sample companies spent more than the mandatory CSR. Sample companies spent 20.13 crores more than the prescribed CSR in FY 2017-18. It shows companies are fulfilling the provisions of the Companies Act 2013 regarding CSR with due seriousness in FY 2017-18. Ashok Leyland Ltd., however, spent less than the mandatory amount on CSR. The highest ranking (on the basis of a company's spending on CSR more than prescribed by law) is given to Tata Motors Ltd. and the lowest to Ashok Leyland Ltd. Maruti Suzuki India Ltd. has spent highest on CSR. It is 125.08 crores. We applied 't' test to check

whether the difference between actual spending on CSR and prescribed CSR in the Indian automobile industry for FY 2017-18 is statistically significant or not.

'T' Test summary		
	Actual CSR Spending (2017-18)	Prescribed CSR (2017-18)
Mean	65.698	61.672
Variance	2150.2452	2392.5199
Stand. Dev.	46.3707	48.9134
n	5	5
Degree of Freedom	8	

Critical value of t is 2.306 at 5% level of significance (two tailed, degree of freedom =8).

Calculated value of t is 0.8362.

**Interpretation of result**

Since the critical value of  $t$  2.306 is more than the calculated value of  $t$  0.8362. Therefore, the second sub null hypothesis is accepted at a 95% level of confidence and it can be concluded that the difference between actual spending on CSR and prescribed CSR in the Indian Automobile Industry for FY 2017-18 is not statistically significant.

**H<sub>0</sub>1.c:** There is no difference between actual spending on CSR and prescribed CSR in the Indian Automobile Industry for the FY 2018-19.

Actual CSR spending, prescribed CSR, difference between actual spending and prescribed CSR and ranking (given on the basis of company's spending on CSR more than prescribed by law) for FY 2018-19 are shown in Table 3.

**Table 3:** CSR Spending for the FY 2018-19 (in Crore)

Serial No.	Company Name	Actual CSR Spending	Prescribed CSR	Difference between Actual Spending on CSR and Prescribed CSR	Ranking given on the basis company's spending on CSR more than prescribed by law
1	Tata Motors Ltd.	22.4	Nil	22.4	1
2	Mahindra & Mahindra Ltd.	93.5	93.37	0.13	4
3	Maruti Suzuki India Ltd.	154	153.50	0.5	3
4	Hero MotoCorp Ltd.	101.95	93.72	8.23	2
5	Ashok Leyland Ltd.	34.06	36.28	-2.22	5
Total		405.91	376.87	29.04	

(Source: Annual Report and CSR Report of Sample Companies)

From table 3, it can be observed that total actual spending on CSR in FY 2018-19 was 405.91 crores, compared to the prescribed CSR of Rs. 376.87 crores. The majority of the sample companies spent greater than prescribed CSR. Sample companies spent 29.04 crores more than the prescribed CSR in FY 2018-19. It shows companies are fulfilling the provisions of the Companies Act 2013 regarding CSR with due seriousness in FY 2018-19. Only Ashok Leyland Ltd. spent less than the prescribed CSR

amount. The highest ranking (on the basis of a company's spending on CSR more than prescribed by law) is given to Tata Motors Ltd. and the lowest to Ashok Leyland Ltd. Maruti Suzuki India Ltd. has spent highest on CSR. It is 154 crores. We applied 't' test to check whether the difference between actual spending on CSR and prescribed CSR in the Indian Automobile Industry for FY 2018-19 is statistically significant or not.

"T" test summary		
	Actual CSR Spending (2018-19)	Prescribed CSR (2018-19)
Mean	81.182	75.374
Variance	2890.3276	3493.4211
Stand. Dev.	53.7618	59.1052
n	5	5
Degree of Freedom	8	

Critical value of  $t$  is 2.306 at 5% level of significance (two tailed for degree of freedom =8).  
Calculated value of  $t$  is 1.289.

**Interpretation of result**

Since the critical value of  $t$  2.306 is more than the calculated value of  $t$  1.289. Therefore, the third sub null hypothesis is accepted at a 95% level of confidence and it can be concluded that the difference between actual spending on CSR and prescribed CSR in the Indian Automobile Industry for FY 2018-19 is not statistically significant.

**H<sub>0</sub>1.d:** There is no difference between actual spending on CSR and prescribed CSR in the Indian Automobile Industry for the FY 2019-20.

Actual CSR spending, prescribed CSR, difference between actual spending and prescribed CSR and ranking (given on the basis of a company's spending on CSR more than prescribed by law) for FY 2019-20 are shown in Table 4.

**Table 4:** CSR Spending for the FY 2019-20 (in Crore)

Serial No.	Company Name	Actual CSR Spending	Prescribed CSR	Difference between Actual spending on CSR and Prescribed CSR	Ranking given on the basis company spending on CSR more than prescribed by law
1	Tata Motors Ltd.	22.91	Nil	22.91	2
2	Mahindra & Mahindra Ltd.	126.59	106.56	20.03	3
3	Maruti Suzuki India Ltd.	168.2	166.6	1.6	4
4	Hero MotoCorp Ltd.	130.61	96.55	34.06	1
5	Ashok Leyland Ltd.	41.52	42.91	-1.39	5
Total		489.83	412.62	77.21	

(Source: Annual Report and CSR Report of Sample Companies)

As per table 4, the actual spending on CSR in FY 2019-20 was 489.83 crores, compared to the prescribed amount of Rs. 412.62 crores. The majority of the sample companies spent more on CSR than was required by law. Sample companies spent 77.21 crores more than the required CSR in

FY 2018-19. It shows companies are fulfilling the provisions of the Companies Act 2013 regarding CSR with due seriousness in FY 2019-20. Only Ashok Leyland Ltd. spent less than the prescribed CSR amount. Hero MotoCorp Ltd. receives the highest ranking (on the basis of a

company's spending on CSR more than prescribed by law), while Ashok Leyland Ltd. receives the lowest. Maruti Suzuki India Ltd. has spent highest on CSR. It is 168.2 crores. We applied 't' test to check whether the difference between actual spending on CSR and prescribed CSR in the Indian Automobile Industry for FY 2019-20 is statistically significant or not.

'T' test summary		
	Actual CSR Spending (2019-20)	Prescribed CSR (2019-19)
Mean	97.966	82.524
Variance	3909.3332	4055.6778
Stand. Dev.	62.5247	63.6842
n	5	5
Degree of Freedom	8	

Critical value of t is 2.306 at 5% level of significance (two tailed, degree of freedom =8).

Calculated value of t is 2.304.

### Interpretation of result

Since the critical value of t 2.306 is greater than the calculated value of t 2.304, therefore, the fourth sub null hypothesis is accepted at a 95% level of confidence. It can be concluded that the difference between actual spending on CSR and prescribed CSR in the Indian Automobile Industry for FY 2019-20 is not statistically significant.

**H<sub>01</sub>:** There is no difference between actual spending on CSR and prescribed CSR in the Indian Automobile Industry. Four sub-hypotheses are used to examine our first hypothesis. With the help of the 't' test, all four sub-hypotheses of the study are accepted and, at 95% level of confidence, it can be concluded that the difference between actual spending on CSR and prescribed CSR in the Indian Automobile Industry for FY 2016-17, 2017-18, 2018-19 and 2019-20 is not statistically significant and after testing the sub-hypotheses, we can affirm that at 95% level of confidence, first hypothesis is accepted, which could be because it has become mandatory for certain categories of companies to comply with the Companies Act 2013 (Section 135), which has made it mandatory for companies to spend at least two percent of their average net profit of the three immediately preceding financial years in pursuance of their CSR policy. But on the other side, we can also conclude that companies are fulfilling corporate social responsibility required by law only. They are not motivated by self-will to spend more than required by law on corporate social responsibility activities. Although the majority of the sample companies spent more on CSR as compared to prescribed CSR, this difference is not statistically significant.

**H<sub>02</sub>:** There is no improvement in CSR spending over a period of time in the Indian Automobile Industry. In the next section, the paired 't' test is used to test our second null hypothesis.

**Table 5:** CSR Spending for the FY 2016-17 and 2019-20 (in Crores)

Serial No.	Company Name	2016-17	2019-20
1	Tata Motors Ltd.	25.94	22.91
2	Mahindra & Mahindra Ltd.	83.30	126.59
3	Maruti Suzuki India Ltd.	89.45	168.2
4	Hero MotoCorp Ltd.	85.14	130.61
5	Ashok Leyland Ltd.	8.33	41.52
Total		292.16	489.83

(Source: Annual Report and CSR Report of Sample Companies)

Total actual spending on CSR in FY 2016-17 was 292.16 crores, whereas total actual spending on CSR in FY 2019-20 was 489.83 crores. With the exception of Tata Motors Ltd., sample companies' CSR spending grows year after year. Tata Motors' total actual spending was 25.94 crore in FY 2016-17 while in FY 2019-20 Tata Motors spent only 22.91

crore. Therefore, after analyzing the data, we can conclude that the majority of the sampled companies' CSR spending has improved over time. We used the Paired Difference "t" test on the data shown in table 5 to determine whether or not the increase in CSR expenditure over time is statistically significant.

Paired-Difference 't' Test Summary		
	CSR Spending (2019-20)	CSR Spending (2016-17)
Mean	97.966	58.432
Variance	3909.3332	4055.6778
Stand. Dev.	62.5247	38.2746
n	5	5
Degree of Freedom	8	

Critical value of t is 2.776 at 5% level of significance (two tailed, degree of freedom = 4).

Calculated value of t is 3.0148.

### Interpretation of result

Since the critical value of t 2.776 is less than the calculated value of t 3.0148. Therefore, the second null hypothesis is rejected at a 95% level of confidence. Therefore, we can conclude that companies' spending on CSR shows improvement over a period of time and improvements in CSR spending over time are statistically significant. The reason could be that when companies spend more on CSR, it

enhances the company's reputation, competitiveness, long-term shareholder value, employee loyalty and motivation, limits government intervention, and, eventually, leads to sustainable growth.

### Conclusion

The aim of the study is to compare the actual CSR spending with the prescribed CSR of the Indian Automobile

Industry. As per the findings, companies spend more on CSR activities than is required by law, although this difference is not statistically significant. The majority of the companies in the sample are just fulfilling the legal requirements when it comes to corporate social responsibility. They aren't driven by a desire to spend more on CSR than is required by law.

However, it is concluded in the study that corporate CSR spending improves with time, and the reason could be that spending more on CSR activities provides endless benefits to a company in the long run. It creates a good public image, increases competitiveness of the firm, makes it easier to access capital, avoid interference of government and society in business, helps in motivation and retention of employees, risk management, reduces risk, decreases fraud in the firm, helps in achievement of the organization's long-term objectives, improves financial performance in the long run, helps in minimizing ecological damage, increases sales and customer loyalty.

**Declaration of interest:** None

### References

1. Anser MK, *et al.* Moderating Effect of Innovation on CSR and Firm Performance in realm of Sustainable Development. *CSR and Environmental Management*. 2018;25(5):799-866. <https://doi.org/10.1002/csr.1495>
2. Annual Reports and CSR Reports of sample companies.
3. Bag S, *et al.* CSR and its overall effects on Financial Performance: Empirical Evidence from Indian Companies. *Journal of African Business*; c2020. <https://doi.org/10.1080/15228916.2020.1826884>
4. Corporate Social Responsibility, Business and Sustainable Development: a Global guide. Retrieved from <http://www.bsdglobal.com/issues/sr.asp>
5. ET 500. Retrieved from; c2019. <https://economictimes.indiatimes.com/marketstats/marketcap-,pageno-8,pid-60,sortby->
6. Jain R, Krishnapriya VS. Effect of Innovation on CSR: Does Ownership Matter? Evidence from Indian Manufacturing Firms. *Economics of Innovation and New Technology*; c2020. <https://doi.org/10.1080/10438599.2020.1843271>
7. Loureiro SMC, Sardinha IMD, Rejinder L. The effect of CSR on Consumer Satisfaction and Perceived Value: the Case of Automobile Industry Sector in Portugal. *Journal of Cleaner Production*. 2012;37:172-178.
8. Prabhavathi K, Dinesh GP. Study of CSR Spent in Indian Banking Industry. *International Journal of Research and Scientific Innovation (IJRSI)*; c2017, 4(4). ISSN 2321-2705.
9. Rai S, Bansal S. An Analysis of Corporate Social Responsibility Expenditure in India. *Economic and Political Weekly*; c2014, 49(50). ISSN (Print) - 0012-9976 | ISSN (Online)-2349-8846.
10. Shanmugam VP, Champramary R, Veeraraghavan R. An Explorative Study on Mandatory CSR Spending with Reference to Section 135 of Companies Act, 2013. Retrieved from SSRN; c2017. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2998992](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2998992).
11. Sharma A, Vanapriya B. An Analytical Study on CSR Expenditure of BSE Listed Companies in India. *International Journal of Human Resource & Industrial Research*. 2016;3(5):64-78. ISSN: 2349-3593 (Online). ISSN: 2349-4816 (Print). DOI: 10.17010/pijom/2017/v10i3/111425
12. Shin JY, Jung M, Khole K, Myung-Su-Chae. Effects of Government Involvement in CSR: An Analysis of the Indian Companies Act 2013. *Emerging Market Finance & Trade*; c2015, 51(2). <https://doi.org/10.1080/1540496X.2015.1021600>
13. Sookcharoen W, Kaewkhiew P, Ongkasuwan M. Consumer Responses to Corporate Social Responsibility Campaigns of Automobile Manufacturers in Thailand. *Proceedings of 5th International Conference on Business and Industrial Research: Smart Technology for next generation of Information 2018, Engineering Business & Social Sciences, ICBIR*; c2018. p. 506-510. <https://doi.org/10.1109/ICBIR.2018.8391250>
14. The Companies Act; c2013. Retrieved from <http://www.mca.gov.in/MinistryV2/companiesact2013.html>
15. The Companies (Amendment) Act; c2019. Retrieved from [https://www.mca.gov.in/Ministry/pdf/AMENDMENTACT\\_01082019.pdf](https://www.mca.gov.in/Ministry/pdf/AMENDMENTACT_01082019.pdf)
16. Valentini C, Kruckeberg D. Walking the Environmental Responsibility talk in the Automobile Industry. An Ethics Case Study of the Volkswagen Environmental Scandal. *Corporate Communication: An International Journal*. 2018;23:528-543. ISSN 1356-3289.
17. Vethirajan C, Ramu C. Consumers Knowledge on Corporate Social Responsibility of Select FMCG Companies in Chennai District. *Journal of International Business and Economics*. 2019;12(11):82-102.