

Investigating the relationship between Corporate Social Responsibility and Financial Performance: A case study on Indian Manufacturing Companies

Abstract

This study investigates the relationship between corporate social responsibility (CSR) and corporate financial performance (CFP) in the context of Indian manufacturing firms. Using secondary data from 150 firms listed in the Nifty 500 index over six years (2014–2019), the study employs multivariate regression analysis to examine both accounting-based (ROA) and market-based (Tobin's Q) performance measures. The results reveal a significant positive association between CSR activities and CFP, highlighting that CSR initiatives enhance profitability and market valuation. Variance inflation factor and stationarity tests confirm the robustness of the models, with R-squared values indicating that independent variables explain 66–67% of the variation in financial performance. The findings underscore the strategic importance of CSR in improving economic outcomes and guiding managerial decisions. While limited to Indian manufacturing firms, the study provides a foundation for further research in cross-country and sectoral comparisons.

Keywords: *CSR; Corporate financial performance; Multivariate analysis; Firm size; Manufacturing sector*

1. INTRODUCTION

For decades, CSR has developed as a buzzword in the business world. Nowadays, investors and stakeholders look into qualitative parameters that reflect upon social commitment and environmental aspects when determining the true worth of a firm. Previously, financial disclosures were adequate to respond to stakeholder demands.

When it comes to deciding and analyzing a company's long-term value, nonfinancial data are often given precedence over financial data [1]. As a result, a company's ethical behavior has gotten a lot of attention.

Hence, globally, the significance of CSR and sustainable studies is increasing. There has been increasing discussion and debate in industry and academic literature regarding Corporate Social responsibility and Corporate Financial Performance nexus[2].

Despite a growing corpus of studies on the subject, the link between Corporate Social Responsibility and CFP remains ambiguous[3]. Nonetheless, there are diverse arguments;

there is no consensus or consistent outcome regarding the link between CSR and corporate performance [4].

The purpose of this study is to investigate the association between Corporate Social Responsibility and CFP. Hence the current study answers the following questions.

- 1) Is there any linkage between CSR and corporate financial performance?

The following is how the manuscript is organized: Importance of the study is presented in Section 2; the literature review and hypotheses are developed in Section 3; the methodology and analyses are presented in Section 4; the results and discussion are presented in Section 5 and analysis and results are presented in Section .6.

2. Importance of the Study

This manuscript addresses the intersection of Corporate Social Responsibility (CSR) and financial performance, an area that has often been underexplored in financial research. By highlighting the qualitative aspects of CSR, it contributes to a deeper understanding of how ethical practices and community engagement can influence a company's financial stability and reputation. The study's focus is particularly relevant as stakeholders increasingly prioritize sustainable and responsible business practices. This work is likely to inspire further research and discussions on integrating CSR into financial decision-making processes, enhancing its significance for the scientific community. This manuscript appears scientifically robust and technically sound for several reasons. The study utilizes a comprehensive dataset of 150 Indian manufacturing firms over six years, which is adequate to ensure a detailed analysis and meaningful conclusions. The methodology is well-structured, employing multivariate regression models and a rigorous approach to test for multicollinearity and stationarity, ensuring the validity and reliability of the results. The inclusion of both accounting-based (ROA) and market-based (Tobin's Q) performance measures strengthens the study's analytical depth and provides a balanced view of corporate financial performance.

Moreover, the theoretical framework is firmly grounded in existing literature, addressing contrasting perspectives and theoretical models to position the study within the broader discourse on CSR and financial performance. While the research is limited to Indian manufacturing firms, it lays a solid foundation for further studies, making a meaningful contribution to the field.

This manuscript addresses voluntary aspects of accounting, particularly corporate social responsibility (CSR), which have historically received limited attention in financial research. By investigating the link between CSR and corporate financial performance, the study contributes to a niche yet increasingly important area of accounting and business strategy.

The focus on CSR as a voluntary disclosure issue highlights its relevance in modern corporate governance and decision-making, aligning with the growing demand for non-financial performance indicators. This emphasis fills a notable gap in the literature, providing insights that are valuable for both academics and practitioners.

2.1 CSR and Corporate Financial Performance

Additionally, the socially responsible initiatives help reduce the cost of capital, subsequently resulting in improved financial performance [5]. Furthermore, increased CSR initiatives allow businesses to take on less financial risk, resulting in enhanced economic stability and government relations [6]. Hence based on the literature review, we hypothesize that

H₁ – There is a significant association between CSR and corporate financial performance.

3. LITERATURE REVIEW

CSR is "Corporate Social Responsibility implies bringing corporate behavior up to a level where it is congruent with the prevailing social norms, values, and expectations" [5]. However, there is a great deal of ambiguity and disagreement about the true definition of corporate social responsibility and the motivations for businesses to embrace it [6]. The social responsibility of business encompasses the economic, legal, ethical and discretionary expectations that society has of organizations at a given point of time. [7]

Over the past decades, CSR has gotten the attention of corporate [8]. Corporate firms realized the importance of Corporate Social Responsibility. CSR has been interpreted through various arguments, ranging from the Friedman model to the corporate citizenship model. A company has no social responsibility; serving stockholders and shareholders is its crucial goal [9].

In contrast, the importance of CSR is emphasized [10]. Later in 1991, a new CSR model is presented and held that an organization's first and foremost objective is to make a profit, that is, "economic responsibility" [11]. Once this objective is accomplished, then comes "legal responsibility" and "ethical responsibility." The ultimate aim is "philanthropic," being a good

corporate citizen by doing charity and helping the poor; this ensures social welfare and goodwill.

CSR's best conceptualization is developing even though CSR has potential benefits in satisfying stakeholder needs; moreover, there are various unanswered issues in the literature, such as how companies implement their CSR policies[12]. CSR and firm performance went through diverse arguments. Theoretically, neoclassical theory suggests CSR activities act as a financial disadvantage to the firm, resulting in an adverse relationship between CSR and firm performance[13]. Additionally, CSR appears to affect an organization's overall appeal to potential employees. Nonetheless, CSR practices impact a company's stakeholders' attitudes and behaviors, but it is still underdeveloped[14]. Also, awareness of CSR policies and activities appears to positively influence consumers' judgments of product characteristics[15].

Several studies have looked at the increased performance benefits of a company's commitment to CSR[16]. Corporate financial performance is an overview of the company's financial status report over a period of time to figure out how successful and profitable a company is in producing revenue.[17]. A favorable relationship suggests that CSR allows businesses to increase sales while cutting costs [18].

Another set of research claims that there is no link between CSR and performance. As a result, a neutral association between CSR and performance is asserted[19]. On the other hand, prior research reveals that investing in CSR has a negative impact on performance[20].

This study examines how Indian companies' CSR and CFP relate to one another, as well as how CSR strategic integration influences this relationship. The study's conclusions demonstrate that CSR has a substantially detrimental effect on CFP[21]. The relationship between CSR initiatives and businesses' financial performance is examined in this study and comes to the conclusion that there is a positive relation between CSR and financial performance[22]

4. Theoretical Framework of the Study

A different approach has been offered in connection with CSR and firm performance relationships. The "Social impact hypothesis" of stakeholder's theory suggests that meeting the expectations of employees and customers will enhance the corporate image and reputation. Ultimately, this will improve the financial result of the firm [23]

5.METHODOLOGY

5.1 Data

The study focuses on India, analyzing data from the top 150 companies listed in the Nifty 500 index. The sampling method is based on company size, selecting the largest firms within the index. The data collection pertains to these prominent companies, providing insights into the relationship between corporate social responsibility and financial performance in a major emerging economy. This study examined secondary data of 150 manufacturing firms. The PROWESS IQ database was used to gather all of the data used in the analysis, including CSR expenditure from 2014 to 2019. Data was collected throughout six years. The software stata is used in this study.

5.2 Correlation for the total sample

Table 1 specifies the correlation of the total sample. A positive correlation between ROA and all the explanatory variables was noticed except leverage.

Table 1. Correlation for the total sample

	ROA	Tobin's q	CSR log	Turnover	LIQ	Leverage	AD insity	VIF
ROA	1							
Tobin's q	.72	1						
CSR log	.154	.109	1					1.03
Turnover	.21	.26	.03	1				1.08
LIQ	.26	.17	.05	-0.17	1			1.10
Leverage	-0.32	-0.28	-0.16	.127	-0.26	1		1.11
AD insity	.27	.29	-0.040	.171	-.045	-.0451	1	1.04

However, there is no such strong correlation identified between the variables. We checked the variance inflation factor to investigate the potential multicollinearity problem. The variance inflation factor ranged from 1.03 to 1.11, indicating multicollinearity is not a severe concern.

5.3 Empirical Model

The researchers employed multivariate regression to determine the association between CSR and CFP. The stationarity of all the variables is tested using the Levin, Lin & Chu t* test and discovered that all variables are stationary at level.

We have estimated the coefficients by using the following model. Both accounting-based and market-based measures are used for measuring corporate financial performance. The first model used to explore the linkage is explained here.

$$ROA_{it} = \alpha_{11} + \beta_{11}CSR\ ex_{it} + \beta_{12}TURN_{it} + \beta_{13}LIQU_{it} + \beta_{14}LEV_{it} + \beta_{15}AD\ insity_{it} + \varepsilon_{it} \dots\dots\dots (1)$$

CSR disclosure can be better predicted by using accounting-based measures (Murray *et al.* 2006). Hence, we used return on assets as a proxy measure for accounting-based performance. In the first model, other than CSR, various other variables are also included since the influence of these variables cannot be ignored from the model.

$$Tobinsq_{it} = \alpha_{21} + \beta_{21}CSR\ ex_{it} + \beta_{22}TURN_{it} + \beta_{23}LIQU_{it} + \beta_{24}LEV_{it} + \beta_{25}AD\ insity_{it} + \varepsilon_{it} \dots\dots\dots (2)$$

In the second model, we try to explore the impact of CSR on market-based measures. The market-based measure is proxied by Tobin's Q. The variables used in this model and their description are explained here in Table 2.

Table 2. Variables used in this model and their description

Variable Name	Variable Abbreviation	Variable Description
Independent variables		
CSR ex	CSR expenditure	The logarithm of the total amount spends on CSR for the year
TURN	Turnover	Net sales divided by total assets
LIQU	Quick ratio (times)	Quick asset divided by current liability
LEV	Debt to equity ratio (times)	Total debt divided by total equity
SIZE	Size	Natural logarithm of total asset

ADVinsty	Advertising Intensity	Advertising expenditure divided by sales
Dependent variables		
Tobin's Q	Tobin's Q	Market capitalization plus long-term debt plus short-term debt divided by total asset.
ROA	Return on asset	Net profit divided by total asset of the company

6. Analysis and Results

Regression analysis

Multivariate regression analysis was conducted to recognize variables that enlighten the variation in corporate financial performance. The study shows that all the variables are highly significant at a 1% level except liquidity in the model (2).

Table 3. CSR -CFP relationship and moderating role.

Variables	Tobin's q	ROA
CSR log	1.603*** (0.222)	3.705*** (0.918)
Turnover	1.018*** (0.149)	3.914*** (0.618)
LIQ	0.118* (0.0668)	1.309*** (0.276)
Leverage	-0.728*** (0.12)	-3.040*** (0.496)
AD insty	26.47*** (5.889)	120.4*** (24.38)
Observation	444	444
R –Squared	.67	.66

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

This shows that CSR positively contributes to corporate financial performance in both the model at 1percent level. Additionally, the R^2 in the model mentioned above is .66 in the first model and .67 in the second model. However, this implies that the independent variables explain 66 and 67 percent of the variation in corporate financial performance. The result of the multivariate regression is given in Table 3.

The firm's CSR activities are positively related to corporate financial performance. The CSR variable coefficient is statistically significant and positive, implying CSR activities improve a firm's economic performance.

IMPLICATIONS AND CONCLUSION

The paper demonstrates a positive relationship between corporate social responsibility (CSR) and corporate financial performance (CFP), as indicated by statistically significant coefficients for CSR variables in both accounting-based (ROA) and market-based (Tobin's Q) models. The results show that CSR activities enhance profitability and market valuation, supported by R-squared values of 0.66 and 0.67, suggesting that independent variables account for a substantial proportion of the variation in CFP. The study has several implications. Firstly the study found a positive relationship between CSR and CFP. CSR has a profound influence on the success of a firm in the global scenario. The outcome will help the managers in strategizing CSR decisions. Additionally, firms can implement obligatory spending because it has a favorable impact on their profitability. Firms will increase CSR expenditure because it increases financial performance and they will consider the environmental and cultural aspects of its operation and CSR will improve the profitability of the firm and the will fulfil the stakeholders' demand . Businesses should not only concentrate on their operations but also take into account the requirements and worries of the communities in which they operate. They should also work to create practical solutions for resolving local problems and raising public awareness of their part in a social cause. The study suffers from limitations as only Indian manufacturing firms are considered; hence, the result cannot be generalized to other countries. Additionally, cross-country comparison, as well as sectoral comparison, can bring further insights into this area. Future research can concentrate on the qualitative and quantitative aspects of CSR and firm's performance and cultural and geographical differences in CSR impact on firm's performance and customer perceptions and CSR.

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REFERENCES

1. Cohen, J., Holder-Webb, L., & Kanellakou, L. (2011). Corporate reporting of non-financial leading indicators of economic performance and sustainability. *Accounting Horizons*, 26(1), 1-23.
<https://doi.org/10.2308/acch-50073>
2. Watts, G., Fernie, S., & Dainty, A. (2019). Paradox and legitimacy in construction: How CSR reports restrict CSR practice. *International Journal of Building Pathology and Adaptation**.
<https://doi.org/10.1108/IJBPA-06-2018-0032>
3. McGuire, J. B., Sundgren, A., & Schneeweis, T. (1988). Corporate social responsibility and firm financial performance. *Academy of Management Journal*, 31*(4), 854-872.
4. Park, B. J. (2021). Corporate social and financial performance: The role of firm life cycle in business groups. *Sustainability*, 13*(13), 7445. <https://doi.org/10.3390/su13137445>
5. Turban, D. B., & Greening, D. W. (1997). Corporate social performance and organizational attractiveness to prospective employees. *Academy of Management Journal*, 40*(3), 658-672.
<https://doi.org/10.5465/256888>
6. Sethi, S. P. (1975). Dimensions of corporate social performance: An analytical framework. *California Management Review*, 17*(3), 58-64. <https://doi.org/10.2307/41164363>
7. Babalola, Y. A. (2012). The impact of corporate social responsibility on firms' profitability in Nigeria. *European Journal of Economics, Finance and Administrative Sciences*, 45, 18-32. <https://www.eujournals.com/EJEFAS.htm>
8. Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review*, 4(4), 497-505. <https://doi.org/10.5465/amr.1979.4498296>.
9. Mughal, Y. H., Jehangir, M., Khan, M., & Saeed, M. (2021). Nexus between corporate social responsibility and firm's performance: A panel data approach. *International Journal of Finance & Economics*, 26*(2), 3173-3188.
10. Friedman, M. (1970). The social responsibility of business is to increase its profits. *The New York Times Magazine**, 9, 32-33.
11. Ackerman, R. W. (1973). How companies respond to social demands. *Harvard Business Review*, 51*(4), 88-98.

12. Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34*(4), 39-48. [https://doi.org/10.1016/0007-6813\(91\)90005-G](https://doi.org/10.1016/0007-6813(91)90005-G)
13. Lindgreen, A., Swaen, V., & Johnston, W. J. (2009). Corporate social responsibility: An empirical investigation of US organizations. *Journal of Business Ethics*, 85*(2), 303-323.
14. Akbon-Selcuk, E. (2019). Corporate social responsibility and financial performance: The moderating role of ownership concentration in Turkey. *Sustainability*, 11*(13), 3643. <https://doi.org/10.3390/su11133643>
15. Brown, T. J., & Dacin, P. A. (1997). The company and the product: Corporate associations and consumer product responses. *Journal of Marketing*, 61*(1), 68-84.
16. Arlow, P., & Gannon, M. J. (1982). Social responsiveness, corporate structure, and economic performance. *Academy of Management Review*, 7*(2), 235-241.
17. Kusumawardani, A., CheHaat, M., Saputra, J., Yusliza, M., Muhammad, Z., & Talib Bon, A. (2021, March). A Review of Corporate Financial Performance Literature: A Mini-Review Approach. In 11th Annual International Conference on Industrial Engineering and Operations Management, <https://doi.org/10.46254/AN11.20210713>.
18. Luo, X., & Bhattacharya, C. B. (2006). Corporate social responsibility, customer satisfaction, and market value. *Journal of Marketing*, 70*(4), 1-18.
19. Aupperle, K. E., Carroll, A. B., & Hatfield, J. D. (1985). An empirical examination of the relationship between corporate social responsibility and profitability. *Academy of Management Journal*, 28*(2), 446-463.
20. Davidson, W. N., & Worrell, D. L. (1990). A comparison and test of the use of accounting and stock-market data in relating corporate social responsibility and financial performance. *Akron Business and Economic Review*, 21*(3), 7-19.
21. Sharma, D., & Chakraborty, S. (2024). Corporate social responsibility and financial performance: Does CSR strategic integration matter? *Cogent Business & Management*, 11(1)
22. Coelho, R., Jayantilal, S., & Ferreira, J. J. (2023). The impact of social responsibility on corporate financial performance: A systematic literature review. *Corporate Social Responsibility and Environmental Management*, 30(1), 450-469. <https://doi.org/10.1002/csr.2363>.

23. Alturki, K. (2014). Voluntary disclosure by Saudi companies. **Research Journal of Finance and Accounting*, 5*(20), 77-94.
24. Babalola, Y. A. (2012). The impact of corporate social responsibility on firms' profitability in Nigeria. **European Journal of Economics, Finance and Administrative Sciences*, 45*(1), 39-50.
25. Bani-Khalid, T., Kouhy, R., & Hassan, A. (2017). The impact of corporate characteristics on social and environmental disclosure (CSED): The case of Jordan. **Journal of Accounting and Auditing: Research & Practice**.
26. Branco, M. C., & Rodrigues, L. L. (2006). Corporate social responsibility and resource-based perspectives. **Journal of Business Ethics*, 69*, 111-132. <https://doi.org/10.1007/s10551-006-9071-z>
27. Dhaliwal, D. S., Li, O. Z., Tsang, A., & Yang, Y. G. (2011). Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. **The Accounting Review*, 86*(1), 59-100.
28. Muttakin, M., & Khan, A. (2014). Determinants of corporate social disclosure: Empirical evidence from Bangladesh. **Advances in Accounting*, 30*(1), 168-175. <https://doi.org/10.1016/j.adiac.2014.03.002>
29. Maqbool, S., & Zameer, M. N. (2018). Corporate social responsibility and financial performance: An empirical analysis of Indian banks. **Future Business Journal*, 4*(1), 84-93. <https://doi.org/10.1016/j.fbj.2018.01.002>
30. Ullmann, A. A. (1985). Data in search of a theory: A critical examination of the relationships among US firms' social performance, social disclosure, and economic performance. **Academy of Management Review*, 10*(3), 540-557.
31. Vance, S. C. (1975). Are socially responsible corporations good investment risks? **Management Review*, 64*(8), 19-24.
32. Waddock, S. A., & Graves, S. B. (1997). The corporate social performance–financial performance link. **Strategic Management Journal*, 18*(4), 303-319. [https://doi.org/10.1002/\(SICD\)1097-0266\(199704\)18:4<303::AID-SMJ860>3.0.CO;2-G](https://doi.org/10.1002/(SICD)1097-0266(199704)18:4<303::AID-SMJ860>3.0.CO;2-G)