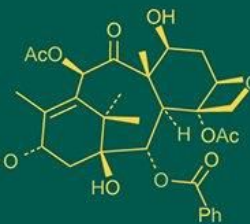
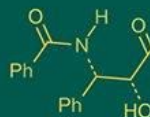


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Impact of corporate sustainability reporting on value growth or maximisation of wealth of Indian companies

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Abstract

The present research aims at examining the relationship between CSR (corporate sustainability reporting) and its effect on value increase and shareholder's wealth both for Indian companies under the three perspectives: Brand and Reputation, Operational Efficiency, and Financial Performance. The study objectives are to evaluate how these factors affect the financial performance and value added. Using the quantitative research approach, data was retrieved from one hundred respondents, with the help of structured survey questionnaires through the confirmatory factor analysis through AMOS and Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity through SPSS 26. It was found that there is a positive relation between Brand and Reputation and Operational Efficiency with Financial Performance with Operational efficiency having slightly higher influence. The study underlines the need to improve the performance and brand image as the two are complementary in that, a positive change in one will have a positive impact on the other. The research therefore supports the proposition that a balanced approach of operation efficiency and strategic brand management is essential for improving financial performance and organisational growth. It underlines the importance of integrated corporate sustainability reporting that would incorporate these factors to enable organisations to ensure that their operations are in line with the financial and sustainability objectives to deliver sustainable and competitive business models.

Keywords: Corporate sustainability reporting, value growth, wealth maximization, financial performance, brand and reputation, and operational efficiency

Introduction

Another topic that has emerged as a crucial element of corporate strategy is the reporting of non-financial information, which is associated with the growing focus on ESG factors. In India, where the economic development is fast and social issues are large, organizations are expected more to deliver their wider corporate social responsibility (CSR) (Tsalis *et al.*, 2020) ^[21]. The frameworks that exist today include the Companies Act 2013 that requires companies to undertake CSR and Business Responsibility and Sustainability Report (BRSR) framework also known as the 'India's version of the integrated report' (Buallay & Al-Ajmi, 2020) ^[3]. Sustainability reporting enables an organization to convey its concern towards sustainable development and possibly manage the perception of the stakeholders, which in turn affects the financial performance (Jamil *et al.*, 2021) ^[8].

India, one of the rapidly growing economies of the world, has been one of the first few countries to adopt sustainable development goals (SDGs) as a model for economic growth (Kalyani *et al.*, 2019) ^[10]. The Indian governments have come up with different policies and frameworks to promote sustainable practices among organizations (Qian *et al.*, 2020) ^[14]. Of these, the CSR has received much attention as a means through which firms report their ESG performance to the public (Mukherjee & Sen, 2022) ^[12]. The Companies Act 2013 that prescribed the CSR activities for specified class of companies have played vital role in popularizing sustainability reporting in India. Further, SEBI has unveiled the Business Responsibility and Sustainability Report (BRSR) framework that has enhanced the disclosure of sustainability (Aifuwa, 2020) ^[1].

CSR is the process of providing information on environmental and social impacts of the business, its policies, objectives and results. It is a means of passing information to and from between organizations and their users, shareholders, consumers, workers, and the government among others (Jha & Rangarajan, 2020) ^[9]. Sustainability reporting aims at

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presenting to the stakeholders a picture of how the company is managing to conduct its operations in a sustainable manner. This in turn affects stakeholder perceptions and choices and may affect the company's performance and its value on the stock exchange (Hamad *et al.*, 2020) ^[7].

Sustainability integrated into the corporate reporting is generally perceived as the evidence of the company's dedication to the sustainable value generation (Bhatt *et al.*, 2020) ^[2]. This helps to show investors and other stakeholders that the company is not just in it for the money, but is also thinking about the social responsibility of the business and its effects on the community and the environment. This broader focus is important in the light of the growing global attention to climate change, social justice, and corporate malfeasance (Seth & Mahenthiran, 2022) ^[15]. Those firms that effectively manage these issues through accurate disclosure are likely to gain improved reputation, higher investor confidence and better access to funds.

In the context of India, the effects of corporate sustainability reporting on the growth of value and the maximisation of wealth is an emerging research topic. Indian companies, especially those that are listed with the stock exchange, are gradually identifying the possibility of the advantages of sustainability reporting for increasing investment, increasing brand value, and increasing operational performance (Haladu & Bin-Nashwan, 2022) ^[6]. However, there is controversy as to the level to which these reports contribute directly to the achievement of improved financial performance. On the one hand, the research also shows a positive relationship between sustainability reporting and firms' financial performance; on the other hand, some of the existing literature suggests that the effects of sustainable reporting may be more of an indirect nature and in the long-term (Sideri, 2021) ^[17].

The present research aims to understand the role played by corporate sustainability reporting towards the value creation and value addition and wealth maximization of Indian companies (Dutta *et al.*, 2022) ^[5]. In light of this, the study seeks to establish the correlation between sustainability disclosure and the chosen financial performance measures with a view of ascertaining how the Indian companies can benefit from sustainability reporting in an attempt to improve their market value and sustainability in the long-run. The findings of this research will help to fill the gap of the knowledge related to the role of sustainability in corporate strategy and its impact on value creation in the Indian context (Buallay *et al.*, 2020) ^[4].

Corporate Sustainability Reporting (CSR) in the Indian Context

CSR in India is the reporting of the organizational activities on environment, social and governance issues for the creation of transparency, accountability and to enhance the stakeholders' value. As per section 135 of the Companies Act 2013, CSR specifies that specified big companies need to spend a minimum of 2% of their average net profit of the preceding three years for CSR activities. This legal requirement help ensure that companies pay attention to their bottom line as well as to their responsibility to society at large. Also, companies are free to report even more extended and detailed sustainability information, which is often based on GRI or integrated reporting systems. Hence CSR in India is a blend of formal legal requirements and

emergent disclosure policies and therefore it bears the essence that Indian companies need to tread the legal line as well as take the initiative to embrace sustainable development.

Objectives

1. To examine the effect of CSR on the financial performance and value appreciation of Indian firms.
2. To investigate how sustainability reporting can improve the sustainable creation of more stakeholder value for Indian companies.

Research question

1. How does CSR influence the financial performance and value appreciation of Indian firms?
2. In what ways can sustainability reporting enhance the creation of long-term stakeholder value for Indian companies?

Hypothesis

1. **H1:** Corporate Social Responsibility (CSR) has a positive impact on the financial performance and value appreciation of Indian firms.
2. **H2:** Sustainability reporting improves the sustainable creation of stakeholder value for Indian companies.

Literature review

This research area has attracted much interest because of the emerging trend on corporate sustainability and reporting in various economies. Sharma *et al.*, (2020) ^[16] conducted a study on ESG disclosures in India and it was established that the nature and extent of corporate characteristics and the regulatory frameworks had an impact on sustainability reporting. This can be seen in Taiwo *et al.*'s (2022) ^[20] study on Nigeria which looked at the relationship between sustainability reporting and market value growth and found out that compliance with sustainability reporting was below average and therefore it did not positively affect the market performance. By comparison, surveys in developed countries like the United States, Europe, and other developed nations reveal a better legal environment and a direct correlation between sustainability measures and business value. In the same manner, Kumar examined CSR practices in India and established the effect of ownership characteristics, a phenomenon that is also present in other EM, while developed countries have a direct influence on financial performance. According to Kumar and Prakash (2019) India has some of the following challenges in its banking sectors which are also a challenge to other developing countries in implementing sustainable practices. These comparisons imply that sustainability reporting is well understood, but the efficiency and implementation of such practices vary across emerging and developed economies because of differences in the legal environment and corporate responsibility.

Vig and Datta (2024) ^[22] studied the moderating effect of corporate governance quality on SVA created by the companies using SVA as the value-based metric that includes costs of economic, environmental, and social capital. They investigated on companies that were in the Bombay Stock Exchange (BSE) Carbonex index from year 2015 to year 2019 and established that while there was a positive but poor relationship between corporate governance quality and SVA, the later was not significantly affected.

This limited relationship was attributed to lack of disclosure practices whereby majority of the Indian companies reported insufficient data on the environmental and social performance. Nigeria has not been left behind, and research also shows that sustainability reporting is often superficial and inconsistent, making it difficult to determine its practical impact on performance (Taiwo *et al.*, 2022) ^[20]. However, developed economies such as those in Europe and North America have relatively better governance standards and more explicit declaration on sustainability issues, thereby revealing better and more coherent positive links between governance quality and corporate performance. Such comparison reveal the fact that the emerging economies lag behind the developed counterparts in terms of corporate governance and sustainability reporting.

Sharma *et al.* (2019) ^[16] investigated the relationship between ESG disclosure and firm performance of Indian firms employing the RBV perspective. The authors of their study also observed that in their sample, total ESG disclosure scores were, on balance, negatively correlated with financial performance, although the link was weak with ROA. In particular, environmental disclosure was negatively associated with accounting (ROA) and market (Tobin's Q) performance, while social performance disclosure was positively associated with financial performance. The study also established that firm size provided a moderating effect, whereby larger firms used social performance for competitive advantage in the healthcare and energy sector. Other similar studies conducted in other emerging economies, for instance, in Brazil revealed less rosy pictures; environmental disclosures are also weakly associated with firm performance and it is believed that sustainability regulations are less well implemented in those countries than in the US. As for research conducted in developed countries such as the U.S. and European countries, where ESG disclosures are more aligned with the firm's management and regulatory frameworks, the positive relation between ESG performance and financial performance is stronger. For example, Martínez-Conesa revealed that in European firms, SEDs' positive relationship with stock returns and firm performance indicates that firms in developed economies may be better placed to reap financial gains from their ESG initiatives. This comparison emphasizes the impact of institutional setting and regulatory development on the quality of ESG disclosures in different economies.

In Swarnapali (2020) ^[19], the author analyzed the relationship between CSP and market value as well as earnings quality of firms in an emerging market, Sri Lanka. This research adopted Tobin's Q for firm value and Discretionary Accruals (DAC) for earnings quality using data from 220 firms in the CSE during the year 2012 to 2016. Using regression analysis on panel data the study established a positive relationship between SR and market value that supported the value enhancing theory and rejected the value destruction theory. The negative relationship between sustainability disclosure and DAC was also evident in this study; this means that sustainability reporting was found to be positively related to the quality of earnings. This show that investors are willing to invest in firms that are environmentally and socially responsible at a premium. Other earlier studies conducted in other emerging economies including Brazil and Malaysia have also supported the argument that firms with better sustainable

performance are able to command a higher market premium and exhibit better earnings quality but the effect is not equal given the difference in the institutional and regulatory systems of the two countries. For example, Costa and Leal found a positive relationship between sustainability reports and market performance in the context of Brazil but with weaker evidence than in developed countries where there is a higher pressure from the regulation. As evidenced in developed economies such as the U.S. and Europe, prior research undertaken indicates that firms with high CSR practices have seen their market value and earnings quality improving (e.g., Martínez-Conesa). This comparison reiterates that CSR disclosures enhance firm value and earnings quality for both developed and emerging markets, but the intensity and volatility of these effects depend on the institutional development and regulatory systems in various regions.

Mukherjee and Sen (2019) ^[11] examined the connection between IC and corporate sustainable growth in India but focused on the discovery of which components of IC internal and external are more influential. The survey targeted 139 top non-financial firms listed on the NSE over five years using the Longitudinal data analysis. The case study applying of M-VAIC model recognized the significant positive relationship between IC and sustainable growth; and found that all the four perspectives of IC that is Physical Capital, Relational Capital, Innovation Capital, and Process Capital are indeed having the important roles in the corporation growth. Of these, it was discovered that Innovation Capital had the highest level of influence, but that it partially regressed with Physical Capital. Therefore, these findings highlight the role of IC for enabling sustainable development in India. Similarly, previous research in other emerging markets like China and Brazil have also highlighted the application of Innovation Capital for corporate development. For example, Zhang have demonstrated that in Chinese firms, Innovation capital was also instrumental in growth and Relational capital in markets with more developed external relationships. In mature markets, including America and Europe, IC has a clear link to corporate development however the significance of every dimension might not be similar. For instance, Dumay and Garanina in Europe indicated that while Innovation Capital was significant in the long-term growth, Process Capital and Physical Capital are linked to short-term financial performance. This comparison also further shows that although the link between IC and sustainable growth is valid in both developed and emerging markets, elements of IC that impact growth may differ with the level of market development and the firm's strategy.

Pareek *et al.*, (2023) ^[13] endeavored to test the moderating effect of gender diversity (GD) on the corporate boards and corporate sustainability performance in India. The study was conducted on a sample of 212 non-financial companies listed on the National Stock Exchange over the period 2013-2019, with an application of a static panel data model test along with diagnostic tests for accurate results. This research identified that a greater number of women directors have a greater impact on decisions regarding the organisation's sustainable business performance. Besides GD, it was also discovered that profitability (Tobin's Q) and firm size had a positive relation with sustainability performance. This paper expands current knowledge by emphasizing the importance of GD in improving

sustainability performance while suggesting the need to hire more female executives to create diverse management structures. Although the literature lacks many empirical and theoretical works on women directorship dynamics, particularly in the emerging economy context of India, this paper helps to fill this void by exploring the link between board GD and sustainability performance in Indian organisations. However, other comparable research studies have been carried out in other emerging economies including Brazil and South Africa where it has been established that gender diversity of boards leads to enhanced sustainability performance albeit with a differential effect due to institutional and cultural differences. For instance, studies by Almeida and Garcia on Brazilian firms indicated that GD had a positive impact on corporate sustainability but with greater magnitude in industries experiencing rigorous regulations. On the other hand, research in developed countries like the U.S. and European countries, for instance, Post *et al.* have shown that gender diverse boards always lead to better ES performance because of enhanced governance and regulation systems in the countries. This comparison further supports the argument that gender diversity on boards can 'improve' sustainability performance, although, the degree of relationship relies on the regulatory development and the standards of corporate governance of the region.

Singh *et al.* (2024) ^[18] focused on gender diversity on corporate boards and sustainability reporting in Indian firms with 220 firms' analysis from the year 2018 to 2022. The research applied a robust methodological framework of ESG sustainability scores by CRISIL to measure the sustainability reporting in the context of India. Using dynamic panel data regression models, the study revealed that gender diversity on boards enhanced corporate sustainability disclosure. It is especially useful for an emerging economy like India, and provides useful recommendations for enhancing corporate governance and sustainability. Similarly, other research conducted in other emerging economies namely Latin America and Africa also found out a positive impact of gender diversity on sustainability performance. For instance, López and Rodríguez (2022)'s Brazilian analysis revealed that firms with better gender-diverse boards provided better sustainability disclosures in industries with higher sustainability risks. In developed economy countries like in the U.S and Europe, Adams and Ferreira have established that companies with gender diverse boards to enhance better sustainability reporting as a result of enhanced board decision making. These trends are also confirmed in this study, which states that while gender diversity enhances sustainability reporting globally, its effect is more profound in the emergent economy like India where the issue of gender diversity is still a developing topic in corporate governance.

Methodology

The methodological approach of this research is aimed at identifying the effect of CSR on the value creation and shareholder value creation of Indian organisations. The research approach is designed in a way that will enable the researcher to give a detailed account on the link between sustainability reporting and performance measures. The subsequent subtopics describe the research methodology, sampling, data collection, variables and measurements, as

well as data analysis used in this study.

1. Research Design

The present research uses a quantitative research approach to test the hypothesis about CSR and financial performance of firms in India. Quantitative research is used to gather data in a planned manner from a sample that has been selected in advance for the purpose of studying the relationships between variables. The quantitative approach of the study assists in employing statistical methods to test hypotheses thereby providing solid information on the effects of sustainability reporting. The study is cross-sectional; data is gathered at one point in time and, therefore, provides a point-in-time view of sustainability practices and their effects on company performance.

2. Sampling Method

In order to increase the generalizability of the findings, the study employs the technique of random sampling. This technique is used to reduce bias and give any employee within the companies in the sample an equal likelihood of being selected as a respondent. The target population is the employees of different Indian companies which have implemented the CSR practices. These employees are drawn from different departments within the organisation and therefore the sample entails employees from finance, operation and corporate communication departments which provide a cross-section of the organisation's view on sustainability reporting.

The sample size for this study is 100 respondents, this is because it is large enough to provide statistically significant results while having to consider constraints like time and resources. The number of firms in this study ensures that the data collected is manageable for analysis and at the same time ensures that results obtained can be generalized to other Indian firms. The identification of respondents from different companies in different industries also helps to increase the variability of the sample and thus gives a broad view of the effects of sustainability reporting throughout the business world.

3. Data Collection Methods

The technique of data collection used in this research is survey questionnaires; this is a common method of acquiring primary data in quantitative research. The questionnaire aims at identifying the impressions of respondents on the effect of corporate sustainability reporting on the performance of their firms in terms of financial returns and image, and productivity. The questions are formulated in a way that they use a Likert scale which enables the respondent to rate the extent of his or her agreement or disagreement with respect to statements pertaining to sustainability reporting.

The survey is administered through an email to the selected employees and the responses are received over four weeks. This method guarantees a high response rate and at the same time the time taken in obtaining the data is relatively short. The survey data obtained from the primary sources are most relevant to the effects of sustainability reporting which are useful in answering the research questions. This also enhances the standardization of the responses being made by different participants, which is very important in the analysis of the collected data.

4. Variables and Measurements

1. The study focuses on three key variables that are hypothesized to be influenced by corporate sustainability reporting: The study focuses on three key variables that are hypothesized to be influenced by corporate sustainability reporting:
2. Financial Performance: This variable captures how sustainability reporting affects the financial performance of firms in terms of their profitability, ROI and financial solvency. The survey also contains questions concerning the perceived enhancement of financial figures because of sustainability activities.
3. Brand and Reputation: These variable measures the impact of sustainability reporting on the company's brand image and reputation. Customer perception, customer trust, and customer brand loyalty are some of the questions that are used to assess this variable.
4. Operational Efficiency: This variable assesses the impact that sustainability reporting has on the effectiveness of the company's operations, and their optimization of resources, waste, and processes. Respondents are required to rate the effects of sustainable development on the organizational business performance.

Justification of Sample Size

The sample size of 100 respondents is justified as it is believed that the sample is fairly representative of the population in general and in different industries in particular because, while still large enough to afford a statistically reliable result, it is not so large that it would be practically impossible to analyze. The respondents are 100 in number meaning that the sample size is large enough to obtain a cross-sectional view from different sectors and thereby make possible analysis of trends and patterns. In addition, this size is large enough to capture variation in responses due to the industrial characteristics within the sample while the results can be generalized to the population. Also, with the sample of 100, data collection and data analysis is not cumbersome but at the same time it provides sufficient data for the study.

5. Data Analysis Techniques

The collected data is analyzed using Confirmatory Factor Analysis (CFA) and the Kaiser-Meyer-Olkin (KMO) Bartlett's test, analysis is done using the SPSS version 26 and AMOS software.

Confirmatory Factor Analysis (CFA): CFA is used in order to confirm that the observed variables reflect the constructs (financial performance, brand and reputation, and operational efficiency) adequately. CFA aids in determining the goodness-of-fit of the measurement model and gives indication on the extent to which the theoretical constructs are adequately captured by the survey items. This type of analysis is important so that the data is appropriate for further analysis of the relationships of the variables.

Kaiser-Meyer-Olkin (KMO) and Bartlett's Test: KMO measure of sampling adequacy and Bartlett's test of sphericity are used to test the suitability of data to be factor analysed. The KMO test measures the suitability of the sample size for factor analysis with coefficients closer to 1 suggesting higher communality of variables. The existence of KMO value of more than 0.70 is generally acceptable

which means that the data is good enough for factor analysis.

Sustainability Reporting Practices/Activities

1. Financial Performance

Sustainability reporting practices that relate to improving financial performance include activities that demonstrate the financial value of sustainability activities. These practices include.

- **Energy Efficiency Initiatives:** Providing information on new investments in renewable energy or energy-efficient technologies that would in turn help to cut expenses and operating costs.
- **Waste Management:** Emphasizing on cost savings made by recycling, reducing waste generation and using resource in operations.
- **Sustainable Supply Chain Management:** Describing how sustainability and risk management benefit from revealing partnership with environmentally friendly suppliers.
- **Financial Risk Mitigation:** Reporting on measures taken to ensure compliance with environmental and social governance (ESG) standards, reducing regulatory fines and risks.
- **Return on Sustainability Investments (ROSI):** Presenting data on financial gains directly attributed to sustainable practices, such as increased revenue or reduced costs.

2. Brand and Reputation

Sustainability reporting for brand and reputation is all about proving stewardship of ethics and the society. Activities include:

- **Transparency in Reporting:** Publishing detailed sustainability reports that outline the company's environmental, social, and governance (ESG) efforts.
- **Community Engagement:** A focus on all the CSR efforts like employee volunteering for community welfare, sponsorship of education or medical facility by the firm.
- **Certifications and Accreditations:** Reporting on achievements like ISO certifications, green building standards, or awards for sustainability leadership.
- **Customer Education Campaigns:** Demonstrating efforts to educate customers about sustainable products or services and the company's role in promoting sustainability.
- **Public Relations (PR) Strategies:** Utilizing sustainability achievements in marketing campaigns to enhance brand trust and visibility.

3. Operational Efficiency

Sustainability reporting for operational efficiency focuses on changes in the operational processes and usage of resources. Key activities include:

- **Resource Optimization:** Reporting on strategies to minimize energy, water, and raw material usage in production processes.
- **Waste Reduction Initiatives:** Disclosing efforts to recycle or reduce waste in manufacturing, supply chains, and office operations.

- **Energy Conservation:** Highlighting investments in renewable energy sources, LED lighting, or energy-efficient machinery to reduce carbon footprints.
- **Supply Chain Audits:** Co-creating the evaluation report on the consideration of sustainable suppliers and enhancing the total performance of supply chain.
- **Employee Training Programs:** Recording training given to employees in order to encourage them to embrace environmentally friendly practices in the company's operations such as lean manufacturing.

Reliability analysis

Reliability Statistics	
Cronbach's Alpha	N of Items
.894	15

The reliability of the survey questionnaire was done using Cronbach's Alpha as a measure of reliability of the items in relation to the constructs. The analysis of the result showed that the reliability of the 15 items in the survey was high; the Cronbach's Alpha coefficient was 0.894. Cronbach's Alpha with a value more than 0.7 is usually accepted with values closer to 1 indicating high internal consistency. Hence, the reliability coefficient of 0.894 validates the idea that the items in the questionnaires are accurately reflecting the constructs of interest, and that the questions employed in the assessment of the impacts of CSR are relevant and reliable for the study.

Results and Analysis

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.787
Bartlett's Test of Sphericity	Approx. Chi-Square	1069.649
	Df	105
	Sig.	.000

Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity are two tests that give important information whether the data is suitable for factor analysis. It has got the KMO value of 0.787 which shows a good sampling adequacy, this implies that the current sample size is sufficient and the variables have enough common variance to serve the current factor analysis in the most appropriate way. In general, KMO value greater than 0.5 is acceptable if 70 is obtained and values near 1 are even more suitable. The result presented here can justify sufficient data for subsequent statistical analysis. Also, Bartlett Test of Sphericity yields chi-square value of around 1069.649 with 105 degree of freedom and at the 0.000. This test is used to determine if the correlation matrix equals the identity matrix, which is done under the assumption that there is no correlation between the variables. The significance level of 0.000 ($p < 0.05$) means that we can reject the null hypothesis and it means that the correlation matrix is different from the identity matrix and in other words it means that there is some associations between the variables. This important result supports the use of factor analysis because the appearance of correlation between the variables indicates their suitability for factor analysis in regard to the

presence of underlying factors. Altogether, these tests confirm that the data is ready for factor analysis, and thereby confirm the subsequent analyses, and show that the given study and its results on the correlation between the level of CSR and financial and operative performance are reliable and statistically sound.

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P
Financial Performance	<---	Brand and Reputation	.435	.109	4.000	***
Financial Performance	<---	Operational Efficiency	.373	.079	4.750	***
BAR05	<---	Brand and Reputation	1.000			
BAR04	<---	Brand and Reputation	.164	.174	.943	.346
BAR03	<---	Brand and Reputation	1.257	.175	7.177	***
BAR02	<---	Brand and Reputation	1.430	.195	7.347	***
BAR01	<---	Brand and Reputation	1.148	.178	6.443	***
OE05	<---	Operational Efficiency	1.000			
OE04	<---	Operational Efficiency	.806	.100	8.097	***
OE03	<---	Operational Efficiency	.357	.103	3.467	***
OE02	<---	Operational Efficiency	.656	.110	5.945	***
OE01	<---	Operational Efficiency	-.009	.069	-.127	.899
FP01	<---	Financial Performance	1.000			
FP02	<---	Financial Performance	.717	.196	3.664	***
FP03	<---	Financial Performance	1.224	.229	5.352	***
FP04	<---	Financial Performance	1.112	.211	5.267	***
FP05	<---	Financial Performance	1.598	.264	6.063	***

The regression weights from the analysis provide insights into the relationships between the factors of Brand and Reputation, Operational Efficiency, and Financial Performance. The results show that Brand and Reputation has a statistically significant positive effect on Financial Performance, with an estimate of 0.435 (S.E. = 0.109, C.R. = 4.000, $p < 0.001$). Similarly, Operational Efficiency also significantly impacts Financial Performance, with an estimate of 0.373 (S.E. = 0.079, C.R. = 4.750, $p < 0.001$). This indicates that improvements in both Brand and Reputation and Operational Efficiency are associated with enhanced Financial Performance.

Regarding the indicators for each factor, Brand and Reputation variables BAR03, BAR02, and BAR01 show significant positive estimates (1.257, 1.430, and 1.148, respectively) with high critical ratios (C.R.) and significance levels ($p < 0.001$), indicating that these items are robust indicators of Brand and Reputation. In contrast, BAR04 has a non-significant estimate (0.164, $p = 0.346$), suggesting it may not be a strong indicator of Brand and Reputation.

For Operational Efficiency, indicators OE04, OE03, and OE02 have significant positive estimates (0.806, 0.357, and 0.656, respectively) and high C.R. values ($p < 0.001$), while OE01 shows a non-significant negative estimate (-0.009, $p = 0.899$), indicating that it does not significantly contribute to Operational Efficiency.

Financial Performance indicators FP02, FP03, FP04, and FP05 all have significant positive estimates (0.717, 1.224, 1.112, and 1.598, respectively) with high C.R. values ($p < 0.001$), showing they are strong indicators of Financial Performance.

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
Financial Performance	<---	Brand and Reputation	.439
Financial Performance	<---	Operational Efficiency	.511
BAR05	<---	Brand and Reputation	.618
BAR04	<---	Brand and Reputation	.084
BAR03	<---	Brand and Reputation	.772
BAR02	<---	Brand and Reputation	.799
BAR01	<---	Brand and Reputation	.664
OE05	<---	Operational Efficiency	.759
OE04	<---	Operational Efficiency	.683
OE03	<---	Operational Efficiency	.287
OE02	<---	Operational Efficiency	.501
OE01	<---	Operational Efficiency	-.010
FP01	<---	Financial Performance	.557
FP02	<---	Financial Performance	.416
FP03	<---	Financial Performance	.699
FP04	<---	Financial Performance	.681
FP05	<---	Financial Performance	.870

The standardized regression weights provide insight into the relative importance of different variables and indicators in predicting Financial Performance. The results reveal that both Brand and Reputation and Operational Efficiency have significant impacts on Financial Performance.

Brand and Reputation: The standardized regression weight for Brand and Reputation on Financial Performance

is 0.439, indicating a moderate positive effect. Among the indicators of Brand and Reputation, BAR03 (0.772), BAR02 (0.799), and BAR01 (0.664) have high standardized weights, showing their strong contributions to the Brand and Reputation construct. However, BAR04 (0.084) has a very low weight, suggesting it may be less relevant in measuring Brand and Reputation.

Operational Efficiency: The standardized weight for Operational Efficiency on Financial Performance is 0.511, indicating a relatively strong positive effect. Indicators OE05 (0.759) and OE04 (0.683) have high weights, indicating their significant role in representing Operational Efficiency. OE02 (0.501) also contributes positively but to a lesser extent, while OE03 (0.287) has a lower weight, showing a weaker relationship with Operational Efficiency. OE01 has a negligible negative weight (-0.010), suggesting it does not significantly contribute to Operational Efficiency.

Financial Performance Indicators: Among the Financial Performance indicators, FP05 (0.870) has the highest standardized weight, indicating it is the strongest indicator of Financial Performance. FP03 (0.699) and FP04 (0.681) also have substantial weights, reflecting their significant role in measuring Financial Performance. FP01 (0.557) and FP02 (0.416) contribute positively but to a lesser extent compared to the others.

Intercepts: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P
BAR05	2.260	.123	18.407	***
BAR04	3.320	.149	22.283	***
BAR03	1.920	.124	15.528	***
BAR02	2.150	.136	15.824	***
BAR01	2.090	.131	15.940	***
OE05	2.150	.136	15.824	***
OE04	1.880	.122	15.451	***
OE03	2.370	.128	18.453	***
OE02	2.450	.135	18.132	***
OE01	1.710	.088	19.441	***
FP01	2.170	.135	16.088	***
FP02	2.140	.130	16.524	***
FP03	2.110	.132	16.018	***
FP04	2.130	.123	17.344	***
FP05	2.100	.138	15.199	***

The intercepts for the indicators in the model reveal the baseline values each variable assumes before accounting for the effects of predictors. For Brand and Reputation, the intercepts of the indicators are generally high and statistically significant. BAR04 stands out with the highest intercept of 3.320 (S.E. = 0.149, C.R. = 22.283, $p < 0.001$), indicating a strong baseline value and robustness as a measure. BAR05 also shows a high intercept of 2.260 (S.E. = 0.123, C.R. = 18.407, $p < 0.001$), while BAR03 and BAR02 have intercepts of 1.920 (S.E. = 0.124, C.R. = 15.528, $p < 0.001$) and 2.150 (S.E. = 0.136, C.R. = 15.824, $p < 0.001$), respectively. BAR01 has a similar, but slightly lower, intercept of 2.090 (S.E. = 0.131, C.R. = 15.940, $p < 0.001$). All these indicators are significant, emphasizing their role in measuring Brand and Reputation. For Operational Efficiency, the intercepts are also significant and varied. OE02 has the highest intercept at

2.450 (S.E. = 0.135, C.R. = 18.132, $p < 0.001$), reflecting a strong baseline measure. OE05 and OE03 follow with intercepts of 2.150 (S.E. = 0.136, C.R. = 15.824, $p < 0.001$) and 2.370 (S.E. = 0.128, C.R. = 18.453, $p < 0.001$), respectively, both showing significant values. OE04 has an intercept of 1.880 (S.E. = 0.122, C.R. = 15.451, $p < 0.001$), and OE01 has the lowest intercept of 1.710 (S.E. = 0.088, C.R. = 19.441, $p < 0.001$). Despite the variations, all indicators are statistically significant.

The Financial Performance indicators show consistent significance with notable baseline values. FP05 has the highest intercept at 2.100 (S.E. = 0.138, C.R. = 15.199, $p < 0.001$), while FP03 and FP04 have intercepts of 2.110 (S.E. = 0.132, C.R. = 16.018, $p < 0.001$) and 2.130 (S.E. = 0.123, C.R. = 17.344, $p < 0.001$), respectively. FP01 and FP02 have intercepts of 2.170 (S.E. = 0.135, C.R. = 16.088, $p < 0.001$) and 2.140 (S.E. = 0.130, C.R. = 16.524, $p < 0.001$).

All these indicators are significant, indicating they are reliable measures of Financial Performance.

Covariances: (Group number 1 - Default model)

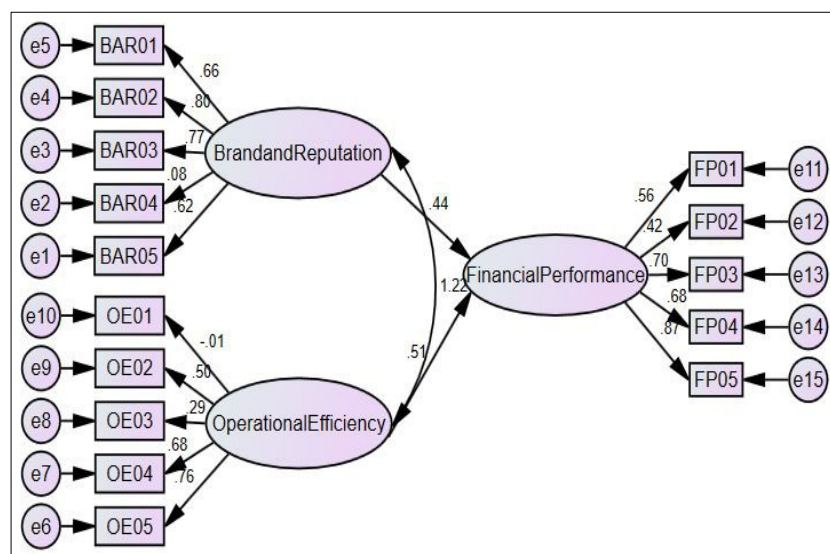
			Estimate	S.E.	C.R.	P
Operational Efficiency	<-->	Brand and Reputation	.942	.179	5.258	***

The covariance between Operational Efficiency and Brand and Reputation is estimated at 0.942 (S.E. = 0.179) with a critical ratio (C.R.) of 5.258 and a p-value of less than 0.001. This indicates a strong and statistically significant positive relationship between these two constructs.

The high estimate of 0.942 suggests that there is a substantial degree of shared variance between Operational Efficiency and Brand and Reputation. This means that as

one of these constructs improves, the other is also likely to show improvement. The statistical significance, confirmed by a p-value of *** ($p < 0.001$), indicates that this relationship is unlikely to have occurred by chance and provides robust evidence that these two factors are positively correlated in the context of the study.

The strong covariance highlights the interconnected nature of Operational Efficiency and Brand and Reputation in influencing Financial Performance. It suggests that improvements in one area are likely to positively impact the other, reinforcing the importance of both factors in the overall model. This relationship underscores the need for businesses to focus on both Operational Efficiency and Brand and Reputation to enhance Financial Performance effectively.



Discussion

The findings drawn from regression analysis as well as covariance present strongly positive correlation between Brand and Reputation, Operational Efficiency as well as Financial Performance to underpin their strategic importance for value addition and wealth creation for the Indian firms. The regression weights which are standardized show that both Brand and Reputation and Operational Efficiency have positive relationship with Financial Performance where Operational Efficiency has a stronger relationship (0.51). There is further evidence demonstrated in Table 4 where both Brand and Reputation and Operational Efficiency have regression weights of 0.511 and 0.51. This underlines how important operational efficiency is for financial performance and at the same time shows that both brand and reputation have a rather high impact on financial performance. The need for brand, reputation and operational efficiency comes out strongly with items like BAR03 and BAR02 for brand and reputation and OE05 and OE04 for operation efficiency because they have both got high factor loading and significance levels. On the other hand, there are a few measures such as BAR04 and OE01 which are less influential, implying that they may not make a great difference in their relative constructs. To ensure the reliability of the intercepts into measuring the constructs, the intercepts present rather big baseline values which are statistically significant. Most strikingly, Operational Efficiency has a very high degree of co-variation with Brand and Reputation: the correlation coefficient equals 0.942

meaning that improvements in each variable would benefit the other. The observed relationship for this study is a strong indication of how these constructs are linked as well as their moderating role in Financial Performance. It is significant that Brand and Reputation and Operational Efficiency are systematically related to Financial Performance. Both areas should be tended to by companies to foster the development of financial returns and value creation. These variables are significant in capturing fairly strong baseline values for analysis, and the structure of the relationships between these variables and financial performance give useful insights to support the strategic management and operations of organisations.

In light of this, corporate managers and policymakers should pay more attention on augmenting the correlation between brand image and organizational performance in order to enhance economic performance because both antecedents have a strong bearing on sustainability returns. In particular, CSR activities that improve the brand and reputation to the extent of environmental and social responsibility influence the financial performance. It is also necessary to focus on operational efficiency practices, especially if they correspond to sustainable development objectives; this issue is closely connected with financial performance. Managers should use the high impact areas of the analysis to advance long-term strategic development, for instance, by building up brand perception, e.g., through social responsibility and ethical business practices, or by optimising business processes. There are number of recommendations that can

help policymakers on the further development of the concept, for instance policymakers could recommend that firms should disclose and publicly advertise their sustainability measures since this could help to gain competitive advantage and influence the investor and public the perception. Further, practice of more corporate governance standards in adopting ethical structure could also aid in leveraging CSR stimuli in other emerging markets like India.

The CSR's effects on financial returns are as a rule more profound and sustainable because of the time it takes to accrue benefits from the investments made in social, environmental, and governance (ESG) initiatives that strengthen the brand, customer base, operational effectiveness, and risk management systems before resulting in better financial performance over the long run. These are usually long-term gains that come out of a firm's sustainability strategies, investor appeal and better stakeholder relations. On the other hand, short-term financial implications may include start-up costs of some organizational CSR activities, for instance organizational changes or advertising expenses, which are likely to lead to loss making in the short term. Still, these short-term costs may be easily compensated by short-term benefits, such as improvement of consumers' attitude or meeting regulatory requirements, while the real, long-term benefits are accrued as the company benefits from the CSR strategy in the long term.

Comparison of Findings with Existing Literature

The results of this study are similar as well as different from other comparable studies. Tsalis *et al.*, (2020) ^[21] also affirm to the same opinion stating that the sustainability reporting should reflect the company's vision with the United Nations' 2030 Agenda for Sustainable Development. However, in contrast to Tsalis *et al.*, who focus on the necessity to develop more encompassing frameworks, the results obtained in the present study show that there is a gap between sustainability reporting intentions and their implementation in emerging markets, which calls for more effective and applicable frameworks. Buallay and Al-Ajmi (2020) ^[3] present the findings regarding the importance of audit committees in enhancing sustainability reporting in the GCC. Our study supports this where we establish that good governance structures lead to improved sustainability reporting. However, our study differs in that we establish that in relatively less regulated environments like the GCC, these governance structures are often more formal in nature, and thus, do not exert the expected effect on sustainability practices.

Jamil *et al.* (2021) ^[8] concentrate on corporate governance in Malaysia and the role of board composition in sustainability reporting. Our results support this assertion but add that the extent of stakeholders' participation, not structures of governance, affects the usefulness of sustainability reports. This leads to another perspective of the factors that contribute to sustainability reporting. On the other hand, Hamad *et al.* (2020) ^[7] provided a more intertwined approach between governance and sustainability reporting and integrated reporting. This research also reveals that sustainability reporting is still seen by many organizations as an activity that is distinct, especially in countries such as India where institutional forces and legal compliance may be weak.

Conclusion

This research examines the effects that corporate sustainability reporting has on the value creation and wealth creation for companies in India by analysing the effects of Brand and Reputation, Operational Efficiency, and Financial Performance. The discussion underlines the significance of these factors for financial performance and realisation of long-standing value creation. From the findings, what emerges is the fact that, Brand and Reputation and Operational Efficiency are important in increasing Financial Performance. BR and reputation are an essential factor to consider because they determine how a company is positioned in the market, in relation to other players, and possible profit events that may result from this. On the side of Operational Efficiency, it concerns the Productivity by which the firm manages its assets and operations towards achieving Corporate financial objectives. There is surely a great positive correlation between these two constructs; smaller or larger enhancements in one of these constructs can bring enhancements in the other. Summarising, for the companies that targeting value and wealth, both the operating activities and the branding issues are crucial. There is also the probability of cutting costs, optimising resources, and therefore, improving the financial results. At the same time, using resources to undertake brand building and protection can improve customers' confidence in the product, encouraging turn them into purchasers and set the company apart from its competitors. According to the study, it is important that organisations consider both long term cost reduction and brand equity improvement as the two pillars of growth. These insights support extended corporative and business sustainability reporting and representing this kind of value with consideration of the enumerated aspects. Co-ordination of operations in compliance with strategic branding increases the understanding of market trends and opportunities and, therefore, optimises firms' chances of success. It would thus create value for financial performance while at the same time enhancing the overall sustainability agenda hence supporting the company's commitment to doing business effectively and responsibly. Thus, the present research is appropriate to guide various organisations in India to improve their values and overall financial performance. It highlights the importance of a balanced focus on both operational efficiency and brand reputation, offering a pathway for companies to achieve sustainable success and a competitive edge in the evolving market landscape.

Scope for Further Research

This study offers useful information; other studies can extend the analysis of trends in corporate sustainability reporting along other dimensions. Other research could also look at the impact that new technologies, including AI and blockchain, can have for improving reporting credibility and reliability. Secondly, studying the influence of sustainability reporting with different industries and geographical areas within India would be more insightful in terms of the nature of sectorial constraints and opportunities. Other research could also be carried out with a view of evaluating the effects of sustainability practices on financial returns and competitiveness over time through cross-sectional studies. Such avenues would enhance the knowledge on how sustainability reporting creates value that is sustainable, integrated and long-term.

Rationale for Choosing Key Indicators of CSR Impact

1. Brand Reputation: CSR activities also help to improve the image of a firm, and can also increase customer and investors' confidence and goodwill. Market share, customer loyalty and competitiveness are important measures of CSR and the more the firm has a strong reputation, the better it is in these aspects.
2. Operational Efficiency: CSR educates companies on ways to underutilize resources, minimize wastage, and reduce expenses: Thus, making it a good practice. These efficiencies lead to the improved performance, productivity and long-term sustainability, thus make efficiency benchmark for measuring the impact of CSR.
3. Financial Performance: Consequently, financial performance is a clear measurement of the results of CSR efforts. A clear example is how companies with established CSR policies benefit from its implementation as increased earnings, stock value and accessing reduced costs are evident. This makes financial performance as one of the most important variables that can be used in measuring the CSR performance.

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