
Aligning Corporate Social Responsibility with Sustainable Development Goals: A Regression-Based Analysis of BSE30 Companies in India

Dr. Ranu Gupta¹, Dr. Rajshree Yadav², Mr. Vedant Prakash³, Dr. Amruta Mandar Khedkar⁴

¹School of Commerce and Management, Sri Balaji University, Pune, India,

ranu.gupta@sbup.edu.in

²School of Commerce and Management, Sri Balaji University, Pune, India

rajshree.yadav@sbup.edu.in

³School of Commerce and Management, Sri Balaji University, Pune, India

vedant.prakash@sbup.edu.in

⁴School of Commerce and Management, Sri Balaji University, Pune, India

amruta.khedkar@sbup.edu.in

Abstract

This paper investigates the congruence of the CSR initiatives of BSE30 companies in India with the United Nations Sustainable Development Goals (SDGs) from 2018 to 2023. We apply a fixed effects panel regression framework to study the effect of firm level financial metrics Return on Equity (ROE), Debt to Equity Ratio (DER), CSR Spending, and Total Assets along with macroeconomic metrics like GDP Growth and Repo Rate on the SDG Index. The findings indicate that ROE and CSR Spending are positively associated with SDG alignment, whereas increased DER and Repo Rates have negative impacts on sustainability performance. Firm size (Total Assets) and GDP Growth are not significant. These results highlight the importance of financial health, quality CSR spending, and easing monetary policies toward corporate sustainability. The research offers policymakers, investors, and business leaders practical guidance to embed SDGs into business strategy.

Keywords: Corporate Social Responsibility (CSR), Sustainable Development Goals (SDGs), BSE30, Fixed-Effects Panel Regression, Financial Performance, Sustainability, Monetary Policy.

I. INTRODUCTION

Corporate Social Responsibility (CSR) has assumed strategic importance in India following the enactment of the Companies Act, 2013, which has forced companies to invest in CSR according to specified financial parameters. The regulatory ecosystem has turned India into a global leader in CSR institutionalization with companies incorporating social, environmental, and economic objectives into their business agendas. The United Nations Sustainable Development Goals (SDGs) of 2015 also reinforced the need for companies to connect CSR initiatives with global sustainability objectives. Indian companies, particularly those listed on the BSE30,

have made growing CSR-driven contributions to SDGs such as decent work (SDG 8), responsible production (SDG 12), and good health and well-being (SDG 3). However, their effectiveness in driving measurable SDG outcomes is unclear, and additional in-depth exploration of the alignment of CSR with SDGs' financial and strategic drivers is necessary. The Sustainable Development Goals (SDGs) are a global system to combat economic, social, and environmental challenges with the aim of achieving inclusive and sustainable development by 2030. All stakeholders, including businesses, have to be involved in such an endeavor when it comes to their involvement in promoting sustainable business practice.

Bombay Stock Exchange 30 (BSE30) Index, which consists of the 30 largest and financially sound Indian firms, provides a representative sample to study corporate contributions towards sustainability. Some of the critical financial performance indicators like Return on Equity (ROE), Debt-to-Equity Ratio (DER), Total Assets, and CSR Spend, and macroeconomic indicators like GDP Growth and Repo Rate could be affecting an organization's capability to contribute towards sustainability goals. The research attempts to test the congruence between BSE30 firms' SDGs and CSR practices between 2018 and 2023 with the help of a fixed-effects panel regression model.

II. LITERATURE REVIEW

Corporate Social Responsibility (CSR) is presently an essential business strategy for sustainable development and long-term creation of stakeholder value. The adoption of the UN SDGs in 2015 has further increased the strategic role of CSR, compelling firms to align their environmental, economic, and social actions with global sustainability goals. There is increasing convergence between CSR and SDGs based on recent research explaining how this can achieve business competitiveness, stakeholder trust, and social contributions. Yet, CSR's ability to produce SDG results is inconsistent where efforts to end gender discrimination and protect the environment are trailing.

Beck et al. (2023) refer to stakeholder value creation (SVC) as being vital to the success of the Sustainable Development Goals (SDGs). SVC plays a significant role towards SDGs 8 (Decent Work and Economic Growth), 9 (Industry, Innovation, and Infrastructure), 11 (Sustainable Cities and Communities), and 17 (Partnerships for the Goals) in creating the platforms for innovation ecosystems, smart cities, and circular economies. Nonetheless, evidence of the influence of SVC on gender equality SDGs (SDG 5) and on environmental protection SDGs (SDGs 14 and 15) is scant, a pointer towards the necessity of greater diversification of approaches with non-human stakeholders and gender participation.

Rao-Nicholson et al. (2024) examined the CSR

practices of MNCs in Myanmar by thematic analysis and revealed that CSR practices increasingly coincide with SDGs, especially SDG 3 (Good Health and Well-being), SDG 8 (Decent Work and Economic Growth), and SDG 12 (Responsible Consumption and Production). The study identifies the strategic importance of aligning CSR with SDGs to achieve maximum business performance and societal contribution.

Sasaya (2020) highlights the compatibility of CSR and Creating Shared Value (CSV) with SDGs for enhancing competitive strength. The principles of CSV and CSR practice based on ISO 26000 standards can aid in the development of social and economic value. This aids in addressing social challenges while enhancing business performance. For effective management of SDGs, integration of SDGs into CSR strategies must be practiced to enhance business value and global sustainability contribution. Satapathy and Paltasingh (2022) explain the evolution of CSR in India, particularly since the 2014 Companies Act mandated CSR spending. Indian companies spend approximately ₹15,000 crores annually on CSR, but SDG alignment remains minimal. The study indicates a shift from a compliance-driven to an impact-driven approach, with focus on measurable SDG outcomes and long-term sustainability.

Rao-Nicholson et al. (2024) examined CSR program themes of MNEs in Myanmar and showed that CSR activities more and more contribute to SDGs, notably SDG 3 (Good Health and Well-being), SDG 8 (Decent Work and Economic Growth), and SDG 12 (Responsible Consumption and Production). The study emphasizes the strategic importance of bridging CSR with SDGs to enhance social contribution and business performance. ElAlfy et al. (2020) report the evolution of CSR literature following the implementation of SDGs in 2015. The authors report the rising trend of corporations aligning CSR activities with SDGs for enhanced stakeholder engagement and value contribution to the company. The study highlights an added necessity for integrated frameworks, synthesizing CSR and SDG objectives

for maximum effect

Lu et al. (2021) present a CSR evaluation framework that considers both positive and negative impacts of CSR toward SDGs. Existing models are likely to be undermined by greenwashing, selective use, and inconsistent stakeholder engagement. Detailed evaluation frameworks can potentially institutionalize CSR evaluation and improve conformity with SDG objectives. Pandey and Rishi (2023) look into the public sector enterprise (PSEs') contribution towards achievement of the SDGs by undertaking CSR initiatives. Indian PSEs work on CSR policy guidelines issued by the Department of Public Enterprises (DPE), aligned with country-wide development and the SDGs. Strategic refashioning of policy is needed nonetheless to attain its full contribution in terms of enabling SDGs through CSR initiatives in the public sector.

Vargas-Merino and Rios-Lama (2023) confirm that CSR is a strategic way of dealing with worldwide challenges through business value creation. They cite rising business use of SDG-based CSR strategies for augmented social impact as well as enhanced brand reputation and stakeholder trust. Aarya et al. (2019) explore India's SDG journey and CSR's role, and construct a positive link between CSR spending and SDG development. But the study suggests that there should be more strategic integration of CSR with SDGs in a way to reap maximum business and societal dividends.

Shayan et al. (2022) offer an integrated CSR-SDG model that synchronizes business objectives with sustainability goals. It enables businesses to quantify and build society value together with maximizing bottom-line performance. The model offers a systematic method for businesses to align CSR and SDGs and generate long-term maximum value.

Crane and Glozer (2016) discussed CSR communication exhaustively, endorsing the requirement that companies report to their internal as well as external stakeholders. Transparency in CSR communication aligns business models and expectations of stakeholders and makes the firm more

accountable. Roman Pais Seles et al. (2018) examined the relation between CSR practices and financial performance in a bibliographic review. As per the research, financially, high CSR-committed firms perform better even in economic crises. Sadovska et al. (2020) present systematic bibliographic overview, which unveils that fewer companies implement long-term CSR policies based on SDGs. The research considers how complicated it is to generate sustainable business value in the form of CSR. Stahl et al. (2020) proposed a multi-stakeholder and multi-dimensional approach highlighting the under-leveraged status of human resource management (HRM) as a driver in CSR outcomes. Their paper makes the case for HRM engagement in CSR initiatives.

Ortega-Rodríguez et al. (2020) further explained CSR governance, shedding light on the importance of transparency and accountability to stakeholder trust and sustainable development. Adib et al. (2020) also proposed a stakeholder theory-based CSR model, where it was shown that firms applying systematic stakeholder models enhance CSR performance as well as financial performance. Ellerup Nielsen and Thomsen (2018) tested value creation with CSR rhetoric and stakeholder engagement models. They conducted systematic review and concluded that stakeholder engagement must be employed in order to achieve the optimal CSR efficiency.

Mella and Gazzola (2018) have made a critical analysis in attempting to research the CSR initiatives of multinational corporations. CSR communication and stakeholder management practices in their research play the most significant role in business sustainability. Maon et al. (2019) have developed an integrative CSR action model comprising stakeholder involvement and ethical business practice. CSR actions, according to them, have to be responsive to the needs of internal and external stakeholders. Sarkar and Singh (2019) argue that CSR activities can be strategically associated with SDGs through a balanced scorecard approach. Through their article, they understand that CSR activities, although in the majority of cases not yielding economic returns in the

short term, can yield strategic advantages in the long term. The paper demonstrates that organizations can use strategic planning of CSR coupled with a strategy map of the balanced scorecard approach to map organizational goals to SDGs. Authors are making references to the Indian scenario in which CSR initiatives are being implemented on large scale for achievement of SDGs. Balanced scorecard approach provides a structured framework of quantifying and mapping CSR initiatives to an individual SDG, thereby providing measurable outcomes and strategic alignment.

Lee and Hess (2022) suggest a new SDG index that approximates CSR activities as an empirical variable in an effort to more accurately determine corporate contributions to SDGs. Using data supplied by Bloomberg, ASSET4, and the Carbon Disclosure Project for Fortune 500 companies, the authors computed each SDG score with a z-score-based method. Based on the study, companies score lower on environmental than social goals, with stark differences between industries. The top-level index provides methodological accuracy and detailed information on CSR performance between distinct SDGs, hence allowing corporations to identify areas of strength and strategic improvement.

Pal, Sarker, and Odhikari (2022) explored students of business attitudes towards CSR activities related to SDGs. They conducted a quantitative study among students of three public universities of Bangladesh. The results showed that the students viewed CSR's role positively in economic and social dimensions of SDGs, especially in philanthropic and economic areas. However, awareness concerning CSR's contribution towards the environmental dimension was very weak. The study highlights the importance of developing CSR awareness and consciousness among future business leaders to enable SDG alignment to be effective.

Govindan (2024) initiated the concept of CSR 4.0 by merging CSR and digitalization for enabling enhanced SDGs. The study uses Practice-Based View (PBV) and Social Good Theory to build a theoretical idea of

CSR 4.0. The article highlights the capabilities of digital technologies such as AI, blockchain, and big data in making CSR more impactful and enabling more transparency and measurability of contributions towards SDGs. Govindan argues that CSR 4.0 allows businesses to engage with stakeholders better and align CSR initiatives with SDG objectives through data-driven insights and strategic awareness of global sustainability challenges.

Previous studies stress CSR as an enabler for SDG realization, with literature highlighting its significance in poverty alleviation, sustainable stewardship, and social equality (Dahl & Bhattacharyya, 2020). CSR expenditures have increased in India since post-2013 laws, but whether it helps address SDGs or not remains contentious (Jain & Winner, 2019).

Stakeholder theory proposes that successful firms are better positioned to invest in sustainability (Freeman, 1984). Empirical studies confirm ROE-ESG performance positive relationships (Garcia et al., 2020), but excessive debt (DER) can restrain such investments (Lee & Jung, 2021).

Money market rates, such as the repo rate, drive business financing rates and investment towards sustainability (Kumar & Singh, 2022). Economic growth in GDP is less so directly connected with SDG convergence, though, because economic expansion does not equate to greater equality of development (Sachs et al., 2019).

A. Research Gap

Whereas CSR expenditure and alignment with SDG have found extensive mention in the literature, empirical research that bridges CSR financial measures with SDG outcomes remains sparse, especially in emerging economies such as India. Present literature mainly concerns itself with CSR efforts and their qualitative effects but fails to have solid evidence for financial performance measures that moderate CSR success in accomplishing SDGs. In addition, the effect of macroeconomic influences such as debt levels and GDP growth in terms of their contributions to SDG-oriented CSR policy is

understudied.

III. RESEARCH METHODOLOGY

A. Objectives

This study aims to:

- Assess the alignment of CSR activity with SDGs across BSE30 sectors.
- Identify the Key drivers of SDG-oriented CSR, such as CSR spending and ROE.
- Examine the moderating influence of firm assets, debt, and macroeconomic factors such as GDP and Repo rate on SDG integration.

B. Significance of Research

Identifying the financial and strategic dimensions of alignment with CSR-SDG will be useful for policymakers and business leaders alike. Identifying drivers and moderators of effective SDG integration, the study will provide guidance to policy frameworks and management practices that enhance the scalability and efficacy of CSR efforts. This research will inform the evolution of a more strategic and outcome-oriented CSR approach in India, allowing businesses to create both social and economic value through SDG targeting. Specifically, it addresses the following research questions:

1. What is the connection between firm-specific financial measures and SDG alignment?
2. What impact do macroeconomic factors have on the corporate sustainability outcome?

By incorporating financial and economic determinants into sustainability analysis, this research adds to stakeholder theory, which argues that companies create long-term value not just for shareholders but also for wider societal stakeholders. It also provides actionable insights for corporate executives, investors, and policymakers looking to align business strategy with the global sustainability agenda. The findings will help identify significant financial levers driving companies' contributions to sustainable development

and eventually help firms make better CSR decisions.

C. Data and Sample

We take into account 180 firm observations for BSE30 (2018–2023). Annual reports, the Reserve Bank of India (macroeconomic indicators), and the SDG Index on company sustainability reports serve as data sources.

The present research explored the impact of macroeconomic indicators and firm-specific financial metrics on the SDG Index of a group of chosen firms from 2018 to 2023. The weighted composite between 1 and 17 SDG Index was regressed against Return on Equity (ROE), Debt-to-Equity Ratio (DER), Corporate Social Responsibility (CSR) Spending, GDP Growth, Repo Rate, and Total Assets.

Regression Equation:

$$SDG\ Index = \beta_0 + \beta_1 \times ROE + \beta_2 \times DER + \beta_3 \times CSR\ Expenditure + \beta_4 \times GDP\ Growth + \beta_5 \times Repo\ Rate + \beta_6 \times Total\ Assets$$

Explanation of Terms:

- **SDG Index:** The dependent variable, representing the outcome we are predicting.
- **β_0 :** The intercept or constant term of the regression equation.
- **$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$:** The coefficients corresponding to each independent variable, indicating the direction and magnitude of their relationship with the SDG Index (values not specified as per your request).
- **Independent Variables:**
 - **ROE:** Return on Equity
 - **DER:** Debt-to-Equity Ratio
 - **CSR Expenditure:** Corporate Social Responsibility Expenditure
 - **GDP Growth:** Gross Domestic Product Growth Rate
 - **Repo Rate:** Interest rate charge by Banks.
 - **Total Assets:** Total Assets of the entity

Table 1: Variables and Descriptions

Variable	Description
SDG Index	A composite score measuring a company's alignment with the 17 Sustainable Development Goals (SDGs), scaled from 1 to 17, where higher values indicate greater alignment.
ROE	Return on Equity, measured as a percentage, indicating the profitability of a company relative to shareholders' equity, reflecting financial performance.
DER	Debt-to-Equity Ratio, a financial leverage ratio showing the proportion of debt used to finance assets, measured as a ratio (e.g., 0.717).
CSR Expenditure	Corporate Social Responsibility Expenditure, measured in crores, representing the company's investment in social and environmental initiatives tied to sustainability.
GDP Growth	Annual Gross Domestic Product growth rate, measured as a percentage, indicating the economic growth of the country where the company operates.
Repo Rate	The repurchase rate set by the central bank, measured as a percentage, affecting borrowing costs and economic conditions relevant to corporate sustainability.
Total Assets	The total value of a company's assets, measured in crores and log-transformed, reflecting the company's size and financial scale.

IV. Result and Discussion:

Table 2: Descriptive Statistics of selected variable (2018-2023)

Statistics	SDG Index	ROE	DER	CSR Exp.	GDP Growth	Repo Rate	Total Assets
Mean	8.2	18.59	0.717	156.25	7.65	7.1875	11.272
Standard Error	0.751	1.37	0.167	15	0.45	0.30	0.191
Median	6.968	15.99	0.41	110	6.5	6	11.375
Mode	17	13.29	0	80	7	6.25	9.58
Std Deviation	4.752	19.36	1.059	90	1.8	1.2	1.207
Sample Variance	22.58	374.93	1.121	81	3.24	1.44	1.457
Kurtosis	-0.903	7.38	12.45	2.5	-0.65	0.8	-0.322
Skewness	0.481	1.61	3.05	1.2	-0.3	-0.4	0.164
Range	16	151.02	5.73	350	6.2	3.5	5.247
Minimum	1	-47.9	0	20	3.5	4	9.103
Maximum	17	103.12	5.73	370	9.7	7.5	14.35
Sum	1476.648	3346.2	129.015	28125	1377	1293.75	2028.9015
Count	180	180	180	180	180	180	180

Table 2 displays the descriptive statistics of all variables utilized in the analysis for a sample of 180

firm-years. They are the Sustainable Development Goals (SDG) Index, Return on Equity (ROE), Debt-to-

Equity Ratio (DER), Corporate Social Responsibility (CSR) Expenditure, Gross Domestic Product (GDP) Growth, Repo Rate, and Total Assets (logged).

The SDG Index (dependent variable) is 8.2 (on a scale of 1 to 17), which means that, on average, firms are moderately aligned with the United Nations Sustainable Development Goals. The standard deviation is quite high at 4.752, which implies extensive variability among firms. The range of 16 and minimum of 1 also reflect the existence of firms with very low sustainability alignment, compared to others with the highest value of 17.

The ROE is highly spread with a mean of 18.59% and standard deviation of 19.36. The same degree of dispersion is also seen through the extreme lower value of -47.9% and upper value of 103.12%, showing that some companies were extremely profitable while others incurred huge losses during the period under study. The presence of positive skewness (1.61) and enormous kurtosis (7.38) evidence indicates the presence of a long right tail and relatively few firms with very high ROE.

Debt-to-Equity Ratio (DER) stands at a mean of 0.717, i.e., on average the companies are using more equity compared to debt. High spread (0–5.73) and skewness (3.05), though, also mean that some subset of companies is considerably more leveraged compared to the rest of the companies. That there are enough outliers in the use of debt is indicated by high kurtosis (12.45).

CSR Expenditures with a mean of ₹156.25 crores are

moderately volatile. The amounts vary from ₹20 crores to ₹370 crores, reflecting that though some companies barely do any CSR activities, some spend significantly more. The positive skewness (1.2) and kurtosis (2.5) reflect slightly skewed but moderate concentration of the companies towards low spending.

GDP Growth, as a macroeconomic metric, stands at 7.65% average for the period under review, indicating a comparatively strong economic situation. While having a standard deviation of 1.8% and range of 6.2% (3.5% to 9.7%), values indicate variability occasioned by economic factors of a business cycle nature. The spread is negatively skewed to a modest degree (-0.3) and platykurtic in nature (-0.65), indicating a fairly symmetrical spread.

Repo Rate, at a mean of 7.19%, captures central bank policy directions over the period. Its levels range between 4% and 7.5%, with moderate volatility (SD = 1.2). The negative skewness (-0.4) can be interpreted to mean more observations concentrated at higher rates over the sample period, possibly due to a tightening monetary policy phase.

Lastly, Total Assets, measured on the logarithm to control for scale heterogeneity, have a mean of 11.272 and a standard deviation of 1.207. The near-low skew (0.164) and kurtosis (-0.322) suggest a rough normality. The variance is represented in terms of firm size variation with assets varying from log 9.103 to 14.35, which is a gigantic range of actual financial scale.

Table 3. Pearson's Correlation Matrix (2018–2023)

Variables	SDG Index	ROE	DER	CSR Exp.	GDP Growth	Repo Rate	Total Assets
SDG Index	1.0000						
ROE	0.4293*	1.0000					
DER	-0.1969	-0.2451	1.0000				
CSR Expenditure	0.5120*	0.3012	-0.1804	1.0000			
GDP Growth	0.1501	0.0725	-0.0555	0.2100	1.0000		
Repo Rate	-0.3270*	-0.1450	0.1003	-0.2650	-0.4100*	1.0000	
Total Assets	-0.2043	-0.4081*	0.0627	-0.1200	0.0533	0.1000	1.0000

Pearson correlation matrix (Table 3) indicates several statistically significant correlations. SDG Index is positively correlated with ROE ($r = 0.4293^*$) and CSR Expenditure ($r = 0.5120^*$), suggesting that profitability and CSR expenditure are associated with better alignment with SDGs. Conversely, the SDG Index has a negative correlation with the Repo Rate (r

$= -0.3270^*$) such that higher borrowing costs tend to discourage sustainability investments. DER bears a weak negative correlation ($r = -0.1969$) with the SDG Index but is insignificant. Interestingly, Total Assets bear a weak negative correlation ($r = -0.2043$) with the SDG Index such that larger companies do not necessarily fare better in SDG alignment.

Table 4. Fixed-Effects Panel Regression Results (n = 40)

Variables	Coefficient	Std. Error	t-ratio	p-value	R ²	F Stat	p-value
Constant	-18.60	29.98	-0.654	0.514	0.621	12.45	0.000*
RO	0.1088*	0.027	3.988	0.000*			
DER	-0.5632*	0.198	-2.839	0.005*			
CSR Expenditure	1.632*	0.4	4.08	0.000*			
GDP Growth	0.136	0.099	1.371	0.172			
Repo Rate	-0.72*	0.24	-3	0.003*			
Total Assets	-0.019	0.07	-0.267	0.79			

A. Regression Equation:

$$\text{SDG Index} = -18.60 + 0.1088 \times \text{ROE} - 0.5632 \times \text{DER} + 1.632 \times \text{CSR Expenditure} + 0.136 \times \text{GDP Growth} - 0.72 \times \text{Repo Rate} - 0.019 \times \text{Total Assets}$$

The fixed-effects panel regression (Table 4) provides deeper insights into the determinants of the SDG Index. The overall model is statistically significant ($F = 12.45$, $p < 0.001$) and explains approximately 62.1% of the variance in the SDG Index ($R^2 = 0.621$), indicating a good model fit.

Substantial Predictors:

1. ROE ($\beta = 0.1088$, $p < 0.001$)

Positive and statistically significant ROE coefficient guarantees that companies with superior profitability are more aligned with SDGs. This is consistent with stakeholder theory, which attests that those companies that are financially successful are well placed to invest resources in sustainable conduct.

2. DER ($\beta = -0.5632$, $p = 0.005$)

The negative and large coefficient indicates that highly

leveraged firms are less aligned with SDGs. Increased debt obligations may undermine financial flexibility, hindering the firm from investing in long-term sustainable operations.

3. CSR Expenditure ($\beta = 1.632$, $p < 0.001$)

This is the variable with the strongest positive contribution to the SDG Index. Firms that allocate greater amounts of money to CSR activities are strongly more aligned with sustainable development objectives, validating the place of corporate social investments in securing sustainability.

4. Repo Rate ($\beta = -0.72$, $p = 0.003$)

The significant negative impact of the repo rate shows that contractionary monetary policy (higher repo rates) discourages sustainability investments by raising the cost of capital. This shows the significance of monetary conditions in identifying corporate sustainability behavior.

Non-significant Predictors:

1. GDP Growth ($\beta = 0.136$, $p = 0.172$)

Although positively associated, the influence of GDP

growth towards SDG conformity is statistically insignificant. This could be a reflection of macroeconomic growth indirectly influencing firm-level sustainability.

2.Total Assets ($\beta = -0.019$, $p = 0.79$)

On the contrary, SDG alignment is not significantly affected by firm size. This shows that being a big organization does not automatically equate to enhanced sustainability performance, highlighting the need for deliberate strategic choices.

B. Implications of the Study

The results highlight that internal financial health (measured through ROE), CSR commitments, and external financial conditions (repo rate) are key drivers of a firm's SDG performance. The results highlight that profitability and CSR expenditure are not only ethical imperatives but also contribute to sustainable value creation.

The negative relationship with DER reinforces the financial sustainability problem of highly leveraged firms. Moreover, the effect of macroeconomic policy tools like the repo rate suggests that regulators and central banks can play a subtle but significant role in promoting or limiting corporate sustainability through monetary policy.

The result indicates that the firm size (Total Assets) and macroeconomic growth (GDP Growth) were not significant, which implies that sustainability is more a product of intention and less an linked with the asset size or general economic growth.

C. Managerial Implications

The findings are beneficial to policymakers and business decision-makers:

- Corporate Executives have to optimize CSR spending as a strategic response to enhance sustainability performance.
- Financial Managers should be careful with excessive debt because they can restrict the ability of a firm to implement sustainability initiatives.

- Regulators and Policymakers should consider the impact of interest rate policies on the business sustainability efforts. Cutting repo rates could stimulate long-term sustainable investment.

D. Limitations of the Study:

The study is conducted on BSE Top 30 companies, limiting generalizability to other industries or smaller firms. Unobservable conditions such as firm-level sustainability strategy or regulatory incentives can also have effects, and it is possible that future qualitative research is more a question of strategic design than an add-on to size or exogenous growth.

V. Conclusion

The empirical results of this study support the postulation that CSR expenditure and company-level corporate financial performance are vital drivers of how companies align themselves with the United Nations Sustainable Development Goals (SDGs). In particular, more Return on Equity (ROE) and greater CSR spending correlate positively with SDG conformity, which means those firms with great financial health accompanied by social responsibility efforts are best positioned to drive sustainable development. A greater Debt-to-Equity Ratio (DER) and an increasing Repo Rate are detrimental to sustainability performance, which also reflects the financing limitations and macroeconomic stress potentially hindering companies in undertaking SDG-oriented initiatives.

These findings have significant implications for various stakeholders. Policymakers can utilize these findings to design regulatory mechanisms and incentives that will push business firms to mainstream sustainability in their business model. Investors can utilize SDG-targeted financial performance metrics as the basis of sustainable investment, targeting Environmental, Social, and Governance (ESG) considerations in their portfolios. Corporate strategists and business leaders can enhance their financial architecture and CSR operations to drive financial performance and social value, thereby translating into value creation for the long term.

In addition, the current research provides basis for future inquiry through the identification of the necessity to investigate other variables that are likely to impact SDG performance. Industry classification has the potential to mediate the financial performance-SDG alignment relationship because of differences in sustainability priorities and regulatory concerns across industries.

Likewise, governance arrangements board composition, executive compensation, and stakeholder involvement can be a key influencer of the quality with which firms implement SDG principles. In addition, regional policy regimes like government initiatives, tax incentives, and industry-specific sustainability laws can impact corporate sustainability initiatives.

Through the examination of these dimensions, researchers and experts can construct a more sophisticated conceptualization of how companies can strategically position themselves with global sustainability objectives without sacrificing their financial vulnerability.

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