Filling the Gap Between ESG Discloser and Financial Performance in Indian Companies: The Moderating Role of the Sustainability Committee

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Abstract

The present study aims to examine the impact of sustainable disclosure on firm performance, while considering the moderating role of the Sustainability Committee (SC) within the Indian business landscape. The sample size consists of 84 ESG-disclosing companies with 336 firm-year observations and employed correlation analysis, balanced panel data analysis with fixed effect method, and random effect method. The study has identified ESG disclosure and sustainability committees are significant and positively associated with profitability and firm performance, while moderate variables have received mixed results. To the best of the authors' knowledge, this is the first research work to address a sustainability committee as a moderator in panel data analysis along with the support of two theories i.e., signaling and stakeholders theory. In the future, researchers may examine the possibility of advancements in this field, while acknowledging the significant role of green initiatives.

1. Introduction

The term sustainability has become a buzzword among investors, customers, and managers. It creates awareness and increases the interest of investors and customers, particularly in the categories of Environmental, Social, and Governance (ESG) practices. Over time, companies have come to acknowledge the significance of ESG practices in attracting investors and customers. They disclosing about their ESG practices in the form of ESG reports (Baran et al., 2022). A complete description of the ESG concept can be disclosed in the company's annual reports (Sonia and Khafid, 2020). Integrating ESG into reports has increased the value of the firm (Abdi et al., 2022). Based on the ESG concept, companies are expected to be able to contribute more to the environmental, social, and governance sectors (De Luci et al., 2020). ESG reporting is a reporting of corporate activities openly related to environmental, social, and governance sectors impacts, including positive and negative contributions to the goals of sustainable development (Kim & Li, 2021). ESG reporting can help a company to evaluate company performance results effectively (Baran et al., 2022). In recent years, an increasing number of companies have shown a stronger dedication to ESG initiatives to gain social recognition (Kim & Li, 2021).

The majority of companies started to disclose sustainability information (Behl et al., 2022). This information will attract investors (Koundouri et al., 2022; Chouaibi et al., 2022). Due to uncertainty in the business world and competition among companies, sustainability information will play a key role in gaining the interest of investors (Abdi et al., 2022). Efficiently oversee and monitor the implementation of these sustainable activities through the establishment of dedicated sustainable committees (Alcaide-Ruiz et al., 2022). Nowadays, sustainable committees are part of the sustainable practices of a company (Qaderi et al., 2022). These are responsible for developing and implementing sustainability activities of the firm (Jarboui et al., 2022). A sustainable committee may have a significant impact on the performance of a firm (Sonia and Khafid, 2020). Through the adoption of sustainability initiatives and practices, an organization can reduce expenses, increase efficiency, and improve its reputation (Alcaide-Ruiz et al., 2022). Avoiding managerial arbitrary behaviour and improving the company's sustainability insist are the responsibilities of the sustainability committee (SC) (Jarboui et al., 2023). Moreover, it mitigates the potential risks associated with environmental and social concerns (Orazalin, 2020). This study uses these sustainable committees as moderator between ESG profitability and firm performance.

The main goal of the company is to make a profit. Profits are a metric to assess the financial performance of the company that attracts attention from other parties (Sonia & Khafid., 2020). Moreover, profitability is positively affected by ESG disclosure (Zhou, et al., 2022). Interest in the link between ESG practices and firm value has grown over the past few years (Chouaibi et al., 2022). Although the corporate sector has expanded significantly over the time, but there is still a need for improvement in terms of social and environmental performance, according to the research findings (Aydoğmuş et al., 2022). This study uses performance of a company as a dependent variable to assess the profitability of a company.

To guide their environmental and social initiatives, many organizations and companies in India have established sustainability committees (Orazalin, 2020). Sustainability Committees plays key role in promoting sustainable performance in companies (Burke et al., 2019). In India existence of SC is voluntary practices of the companies. Among those companies are Reliance Industries, Indian Hotels, Rallies India, Tata Chemicals, Tata Consultancy Services, Tata Motors. These SCs have impact the ESG performance of the company (Jarboui et al., 2023). The literature has examined the impact of ESG on firm financial performance with an mediating roles of firm size and age (Abdi et al., 2022), CEO education and tenure (Ghardallou, 2022), Corporate Social Responsibility (Orazalin, 2020), green innovation (Chouaibi, Chouaibi and Rossi, 2022), moderating effect of size and industry sensitivity (Zaiane & Ellouze, 2022) however these studies did not analyse SC mediating or moderating role that could affect ESG performance of the company. By precisely investigating the impact of SC characteristics on ESG performance, our study sought to close this gap.

Furthermore, this study contributes to the existing literature by most active determinants of the ESG Disclosure to measure the firm performance of Indian companies. previous studies have not distinguished. To the best of authors knowledge this is the first study to address Sustainability Committee as a moderator to the ESG Disclosure to measure the firm performance. The interaction between ESG Disclosure and sustainability Committee significantly enhance the existing literature and it is more useful to researchers and policy makers. There may be an implication for investors and customers to be attracted to the companies with high ESG scores in the share and even in the consumer market too.

The structure of the paper is as follows: Section 2 theoretical background, Section 3 discusses prior literature and hypotheses development. Section 4 describes data, variables, and methodology. Section 5 states the results. Section 6 provides conclusion of the study and suggestions for future research.

2. Theoretical background

2.1. Theory of Stakeholder:

ESG is linked with the theory of stakeholders, it covers who the company should behave in the interests of, in addition to the interests of shareholders, and both internal and external stakeholders, including employees, vendors, and governments (Baran et al., 2022). Based on theory, Companies will go to extremes to keep their stakeholders' perceptions of the companies favourable by disclosing information. (Ersoy et al., 2022). The trust and positive image of stakeholders will continue to persist with the companies providing information on sustainability report disclosure (Abdi, Li and Càmara, 2022). Creditors will use this information to demonstrate that the companies are in a stable financial situation, which is one in which they can settle their present debt with current assets in less than a year (Jarboui et al., 2022). In addition, the Stakeholder theory also contends that ethical and sustainable business practices can reduce the risk of negative social and environmental effects that might eventually harm the business (Kim, Son and Jin, 2022). Businesses can cultivate a great reputation, foster customer loyalty, attract top talent, and make decisions that are beneficial to both the firm and society (Zhou, Liu and Luo, 2022). These actions can all have a long-term positive impact on financial success.

2.2. Signalling theory:

Signalling theory suggests that companies can use signals or cues to communicate their quality and characteristics to external stakeholders. In the context of ESG, companies can use ESG disclosure as a signalling mechanism to communicate their commitment to sustainability and responsible business practices (Wu et al., 2022). By voluntarily disclosing their ESG performance and initiatives, companies can signal to investors, customers, and other stakeholders that they are committed to sustainable practices and are taking steps to mitigate environmental and social risks (Zhou, Liu and Luo, 2022). This can enhance the company's reputation, increase stakeholder trust, and ultimately contribute to better financial performance (Giannopoulos et al., 2022). Overall, signalling theory can provide a useful framework for understanding the relationship between ESG disclosure and stakeholder perceptions of corporate sustainability and responsibility.

3. Literature Review and Hypothesis Development

This study attempted to find out the relationship between ESG disclosure and profitability in Indian companies. particularly, this work uses a sustainable committee as a moderator variable and how this is impacting profitability. Numerous types of empirical studies have previously investigated how ESG variables affect corporate finance and investment management.

The above Fig. 1 describes about the conceptual model of our study. In the conceptual model our moderating variable is Sustainability Committee, our dependent variables are profitability, performance of the company and independent variable is ESG Disclosure Score.

3.1 ESG discloser and Firm performance.

The relationship between ESG disclosure and firm financial performance is a complex and ongoing area of research, with mixed results. While some studies suggest that there is a positive relationship between ESG disclosure and firm financial performance (Kim and Li, 2021), other studies have found no significant relationship or even a negative relationship (Giannopoulos et al., 2022). One possible reason for the mixed results is that the impact of ESG disclosure on financial performance may depend on various factors, such as the industry, country, and type of ESG disclosure. For example, Abdi (2022) has explored the relationship between ESG and firm value with the moderating role of size and age and found a positive relationship. Many studies have studied the relationship between ESG and firm performance and they have reported a positive relationship between them (Sandberg, Alnoor and Tiberius, 2022). The stock price of a firm and other aspects of its sustainability goals may be affected by ESG considerations. An investor's goal is to earn a profit that has a positive impact on the environment and community. Some studies have studied the relationship between environment and profitability but they have found a negative impact (Sandberg et al., 2022; Bala, 2022; Kim & Li, 2021; Gao et al., 2022; Saygili et al., 2022). This is because environmental projects require a long time investment (Wu et al., 2022). Apart from this, very few studies have found a positive relationship between environment and profitability (Abdi et al., 2022; Aydoğmuş et al., 2022).

Hypothesis 1

ESG discloser has a positive impact on Firm performance.

3.2 sustainability committee and ESG on Firm Performance

On one hand, sustainability committees can provide several benefits to firms. Sustainability committees can help firms to identify and manage environmental and social risks, develop and implement sustainability strategies, and enhance stakeholder engagement and communication (Orazalin, 2020). Research has shown that having a sustainability committee can have a positive impact on firm performance (Alcaide-Ruiz, Bravo-Urquiza and Moreno-Ureba, 2022). Companies can save expenses related to the use of energy and resources, enhance their standing with stakeholders and customers, and reduce risks related to regulatory compliance by implementing sustainable practices (Jarboui, Dammak Ben Hlima and Bouaziz, 2022). Overall, the establishment of a sustainability committee and the adoption of sustainable practices can lead to long-term benefits for both the environment and a company's bottom line. Moreover, sustainability committees can help to identify opportunities for cost savings, such as reducing energy or water consumption, which can lead to improved profitability (Orazalin, 2020). For example, companies that invest in renewable energy sources or energy-efficient technologies can benefit from reduced energy costs in the long run. Additionally, companies that prioritize sustainability can often attract a growing base of sustainability-conscious customers and investors, which can ultimately lead to increased revenue and profitability in the long run (Ghardallou, 2022).

Hypothesis 2

sustainability committee and ESG have a positive impact on Firm Performance

3.3 ESG disclosure and Firm Profitability

The literature describes there is a linkage between ESG disclosure and firm profitability. Gao et al., (2022) have studied the relationship between ESG activities and financial indices in publicly traded Chinese companies, by employing both dynamic and static panel data analysis. Have found a positive association between the market value and stock price of a company affected by ESG factors. Supporting this, some studies found a positive relationship between ESG disclosure on the profitability of a firm. In this context, Maqbool & Zameer (2018), have analysed the connection between corporate social responsibility (CSR) and financial performance in the Indian context. He has found a positive correlation between CSR and the firm's financial performance, especially in the long run. Corporate governance as a factor of ESG has a positive impact on corporate profitability and environmental factor has a negative effect (Kim and Li, 2021).

Hypothesis 3

ESG disclosure has a positive impact on Firm Profitability

3.4 sustainability committee and ESG on Firm Profitability

There have been several studies that have shown a positive correlation between a company's sustainability efforts and their financial performance. One such study, conducted utilizing dynamic and static panel data analysis, investigate the relationship between ESG activities and financial indices in China's publicly traded companies (Gao, Li and Zou, 2022). Supporting this, a study was conducted in the airline industry with the moderating role of firm size. Found that ESG has a significant impact on profitability (Abdi, Li and Càmara, 2022). Additionally, having a dedicated sustainability committee within a company can lead to more effective implementation of sustainable practices and policies, which can ultimately lead to cost savings and increased profitability (Orazalin, 2020). This was highlighted in a similarly to this, which found that companies with sustainability committees had a higher return on assets and return on equity compared to those without such committees (Burke, Hoitash and Hoitash, 2019). Overall, it appears that prioritizing sustainability and ESG considerations can have a positive impact on a company's bottom line.

Hypothesis 4

sustainability committee and ESG have a positive impact on Firm Profitability

4. Methodology

4.1 Sample and data source

The population of current study includes the Indian listed companies listed on Bombay Stock Exchange popularly known as BSE. Among the top 500 listed companies, the current study has lessened down to 84 companies based on their overall environmental, social and governance (ESG) disclosure over four-year time frame (2018–2021). The selection of 84 ESG disclosure companies have several reasons. The sample companies are more concern towards to social and environmental activities and have significant impact on society since they are the few to disclose overall ESG information. Similarly, the sample companies disclose quality sustainable information and meet the stakeholders' requirements. The present study follows purposive sampling method under non-probability sampling technique. The purposive sampling is followed to choose 84 Indian companies that provide complete ESG disclosure. This study is completely depending on secondary source and the financial and sustainability (ESG) data is collected from Bloomberg database.

The most contributing sector is fast moving consumer goods (FMCG) sector with nine companies, followed by other with seven companies. The least contributing sector is petroleum with only two companies. Remaining sectorial contribution is presented in Fig. 2.

4.2 Variable description

Table 1
presents variable descriptions

Variable	Description
Dependent Variable	
(i) Tobin Q	Is proxy to firm performance and measured as Market capital + total liabilities divided by total assets.
(ii) Profitability	Represents as return on equity (ROE) and measured as net profit/ equity.
Independent Variable	
ESG	Is over all environmental, social and governance (ESG) score taken from Bloomberg database.
Moderator	
SC	Sustainability committee (SC) is a dummy variable the presence of SC in companies annual report allot one and absence of SC is zero.
Control variable	
FA	Firm age (FA) incorporation of firm and assumes that older the age of firms is like to have positive performance.
BS	Board size (BS) maximum number of members holds on board and assumes that larger board promote sustainability information, which results in positive performance.
FS	Firm size (FS) is measured as natural logarithm of total assets. Larger firms like to generate more profits and higher performance.
Sol	Solvency (Sol) is measured as ratio of debt to equity and it influence firm performance.

4.3 Model Specification

The present study defines the following mathematical equation to examines the association s

$ROE_{it} = \beta_0 + \beta_1 ESG_{it} + \beta_2 FA_{it} + \beta_3 BS_{it} + \beta_4 FS_{it} + \beta_5 Sol_{it} + u_{it}$. ------------------------------(1)

$ROE_{it} = \beta_0 + \beta_1 ESG_{it} + \beta_2 SC_{it} + \beta_3 SC{*}ESG_{it} + \beta_4 FS_{it} + \beta_5 BS_{it} + \beta_6 FS_{it} + \beta_7 Sol_{it} + u_{it}$. -----(2)

$TobinQ_{it} = \beta_0 + \beta_1 ESG_{it} + \beta_2 FA_{it} + \beta_3 BS_{it} + \beta_4 FS_{it} + \beta_5 Sol_{it} + u_{it}$. ----------------------------- (3)

$TobinQ_{it} = \beta_0 + \beta_1 ESG_{it} + \beta_2 SC_{it} + \beta_3 SC{*}ESG_{it} + \beta_4 FS_{it} + \beta_5 BS_{it} + \beta_6 FS_{it} + \beta_7 Sol_{it} + u_{it}$. ---(4)

5. Results and Discussions

5.1 Descriptive statistics and Correlation Analysis

The above Table-2 combinedly presents summery statistics and correlation analysis. In Table 2 the profitability's average score is 16.97. Another dependent variable Tobin Q's value has an average score of 8.69, which indicates firm has created strong firm performance and profitability. The independent variable has an average score of 45.66, which denotes sample listed companies disclose more sustainable information compared with other non-sample companies. The moderate variable sustainable committee has low mean score of 0.19, which means only limited companies adopt sustainable committees and helps to disclose more sustainable information. Firm age has an average score of 48.89, board size has mean score of 10.33, which indicates listed firms has moderate board presence. Firm size has an average score of 11.99 and solvency has an average score of 0.04. Similarly, the Table 2 describes correlation analysis. The study found profitability and firm performance found positively correlated with ESG disclosure but the sustainable committee, firm age, board size, firm size and solvency has negative correlation with firm performance and profitability. The firm performance has negative correlation with ESG disclosure and positive correlation with sustainability committee. The study found no problem of multicollinearity among the proposed variables, and it is justified with variance inflation factor (VIF). The VIF results disclosed that the study is absolute free from multicollinearity issue. Therefore, VIF is lower than the ideal base point. The maximum VIF is 1.53 for ESG overall disclosure and the minimum VIF is 1.07 for firm performance. Similarly, we have conducted white's normality test and found data is normally distributed.

5.2 Regression Analysis

The study's objective is to validate either the overall sustainable disclosure levels and having sustainable committee result in improvement of firms' profitability and firms' performance. We investigated the projected hypothesis with the help of balanced panel data analysis by employing POLS, FE and RE models. In addition, we have tested Hausman specification test to choose best fitted model for our proposed hypothesis and the results found that for Model 1 and for Model 2 FE is more suitable model to describe the results. Hence, we interpret only FE results for Model 1 and 2, in which profitability is our dependent variable, ESG disclosure is our independent variable and sustainable committee as moderator (ESG*SC).

Table 3 present results of both Model 1 and 2. The ESG disclosure has significant effect on profitability of the firm at p-value of 0.0 for Model 1 and p-value of 0.0 for Model 2, which indicates that sustainable disclosure enables the firms to gain higher profits and meets the expectations of the stakeholder groups. If the ESG disclosure increase with one unit means, there will be an increase in profitability with 0.22 units and 0.88 units respectively. Hence, the study accepts proposed hypothesis one (H_1). It is identified through results that firms with more commitments towards quality sustainable (ESG) disclosure have seen significant improvement in firms' profitability (ROE). Therefore, firms with sustainable commitment tend to focused more on reducing pollution, and take the process of recycling waste material though sustainable capital investments. Thus, invested capital on sustainable projects helps the firms to generate more profits to the business. Hence, Aydogmus et al. (2022); Velte (2017); De Lucia et al. (2020) justified that ESG disclosure has substantial effect on improvement in firm's profitability.

The sustainable committee has significant but negatively associated with firm's profitability at p-value of 0.0, which denotes that having a separate sustainable committee does not guarantee to improve the firm's profitability. Perhaps, the formation of sustainable committee is voluntary and the purpose of this committee might not be defined clearly in the initial stage of establishment (Orazalin et al., 2023). Therefore, our results are contradictory to the outcomes of Orazalin et al. (2023) and found formation of sustainable committee has significant effect on market value of the firm. Next, the interactive variable (ESG*SC) has significant association with profitability at p-value of 0.0, which denotes that moderating effect has substantial influence on profitability of the firm. If the moderator (ESG*SC) disclosure increase with one unit means, there will be an improvement in firm's profitability with 1.29 units. Hence, the present study accepts proposed hypothesis two (H_2). The study supports the theory of signalling and stakeholders. The positive effect of moderator gives positive signals to investors, markets, and other key stakeholders for effective decision process. The positive impact of interactive variable improves the firm's legitimacy in the market, gains the attention of the capital providers and maintain healthy relationship with stakeholder groups. Hence, having a separate sustainability committees focus much on sustainable disclosure, betters the carbon performance, and improves the climate change which initiative to enhance firm's profitability. Orazalin et al. (2023) justified that interactive variable (board sustainable committee) has significant effect on market value for European Union countries which falls under the category of Emission trading system (EU ETS).

Table 2
Descriptive and Correlation Analysis:

Variable	Obs	Mean	SD	VIF	1/VIF	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ROE	336	16.97	19.48	--	--	1.0							
Tobin Q	336	8.69	53.51	1.07	0.93	0.01	1.0						
ESG	336	45.66	11.58	1.53	0.65	0.03	-0.003	1.0					
SC	336	0.19	0.39	1.32	0.76	-0.004	0.10	0.38	1.0				
FA	336	48.89	24.79	1.16	0.86	-0.06	0.09	0.20	0.12	1.0			
BS	336	10.33	2.85	1.14	0.88	-0.06	-0.12	0.19	-0.12	0.14	1.0		
FS	336	11.99	1.63	1.40	0.71	-0.12	-0.14	0.47	0.20	0.03	0.25	1.0	
Sol	336	.04	4.43	1.19	0.83	-0.01	0.05	0.02	-0.21	-0.26	0.02	0.15	1.0
Mean VIF				1.26									

Note: ROE- return on equity, ESG- environment, social and governance, SC- Sustainability committee, FA-firm age, BS-board size, FS-firm size, Sol-solvency, Obs-observations, SD-Standard deviation, VIF- Variance inflation factor.

Table 3
Balanced panel data results (Dependent variable is profitability)

	Model 1						**Model 2**					
	POLS (ROE)		**FE**		RE		POLS (ROE)		**FE**		RE	
Variable	Cof.	t-value	**Cof.**	**t-value**	Cof.	t-value	Cof.	t-value	**Cof.**	**t-value**	Cof.	t-value
ESG	0.22	2.08 (.04) **	**1.19**	**4.31 (0) *****	0.32	2.55 (.01) ***	0.08	0.59 (.55)	**0.86**	**3.05 (.0) *****	0.15	1.01 (.31)
SC	---	---	**—**	**—**	---	---	-37.38	-2.70 (.01) ***	**-68.95**	**-4.04 (0) *****	-50.69	-3.54 (0) ***
ESG*SC	---	---	**—**	**—**	---	---	0.68	2.68 (.01) ***	**1.23**	**3.91 (0) *****	0.90	3.44 (0) ***
FA	-0.07	-1.45 (.15)	**-0.04**	**-0.03 (.98)**	-0.08	-1.34 (.18)	-0.05	-1.03 (.30)	**0.45**	**0.34 (.73)**	-0.05	-0.87 (.38)
BS	-0.24	-0.63 (.53)	**0.20**	**0.20 (.84)**	-0.24	-0.53 (.60)	-0.35	-0.88 (.38)	**0.16**	**0.16 (.87)**	-0.39	-0.83 (.41)
FS	-1.99	-2.64 (.01) ***	**-19.74**	**-2.35 (.02) ****	-2.41	-2.53 (.01) ***	-1.62	-2.12 (.04) **	**-19.65**	**-2.40 (.02) ****	-1.94	-1.98 (.05) **
Sol	− .05	-0.25 (.80)	**0.25**	**0.59 (.55)**	-0.09	-0.40 (.69)	-0.18	-0.90 (.37)	**0.21**	**0.52 (.61)**	-0.25	-1.11 (.27)
Constant	36.39	4.38 (0) ***	**198.82**	**2.68 (.01) *****	37.40	3.53 (0) ***	38.77	4.62 (0) ***	**190.13**	**2.62 (.01) *****	40.15	3.69 (0) ***
R^2	0.03		**0.09**		0.07		0.05		**0.15**		0.05	
F test	2.11 (.06) *		**4.87 (0) *****		Chi^2 10.92 (.05) **		2.58 (.01) ***		**6.02 (0) *****		Chi^2 23.98 (0) ***	
			Hausman Chi^2 16. 97 (.01) ***						Hausman Chi^2 21.97 (.003) ***			

Note: ESG- environment, social and governance disclosure, SC- sustainability committee, FA- firm age, BS- board size, FS- firm size, Sol- solvency, POLS- pooled ordinary least square, FE- fixed effect, RE- random effect and Cof- Coefficient.

Table 4
Balanced panel data results (Dependent variable is firm performance).

	Model 3						Model 4					
	POLS (Tobin Q)		FE		**RE**		POLS (TobinQ)		FE		**RE**	
Variable	Cof.	t-value	Cof.	t-value	**Cof.**	**t-value**	Cof.	t-value	Cof.	t-value	**Cof.**	**t-value**
ESG	0.32	1.11 (.27)	0.37	1.84 (.07) *	**0.42**	**2.31 (.02) ****	0.29	0.85 (.40)	0.46	2.21 (.05) **	**0.44**	**2.36 (.02) ****
SC	---	----	---	---	**—**	**–**	60.02	1.59 (.11)	28.81	2.32 (.02) **	**29.51**	**2.43 (.02) ****
ESG*SC	--	---	---	–	**–**	**—**	-0.80	-1.17 (.25)	-0.35	-1.52 (.13)	**-0.36**	**-1.58 (.11)**
FA	0.28	2.23 (.03) **	0.94	1.01 (.32)	**0.30**	**1.32 (.19)**	0.25	2.01 (.05) **	0.07	0.08 (.94)	**0.21**	**0.93 (.35)**
BS	-2.16	-2.07 (.04) **	-0.72	-1.00 (.32)	**-1.03**	**-1.55 (.12)**	-1.58	-1.49 (.14)	-0.55	-0.79 (.43)	**-0.73**	**-1.12 (.27)**
FS	-5.51	-2.70 (.01) ***	-4.10	-0.68 (.50)	**-4.30**	**-1.47 (.14)**	-6.34	-3.06 (.0) ***	-2.80	-0.47 (.64)	**-5.42**	**-1.86 (.06) ***
Sol	0.97	1.91 (.06) *	0.50	1.68 (.09) *	**0.55**	**2.12 (.03) ****	1.36	2.55 (.01) ***	0.50	1.71 (.09) *	**0.61**	**2.39 (.02) ****
Constant	69.27	3.07 (.0) ***	2.65	0.05 (.96)	**37.50**	**1.09 (.28)**	72.84	3.19 (.0) ***	21.98	0.42 (.68)	**49.10**	**1.43 (.15)**
R^2	0.06		0.05		**0.05**		0.07		0.09		**0.06**	
F test	F-test: 3.81 (0) ***		F-test: 2.50 (0) ***		**Chi^2 10.92 (.01) *****		F-test: 3.55 (0) ***		F-test: 3.57 (0) ***		**Chi^2 29.79 (.0) *****	
			Hausman Chi^2 1.90 (.86) ***						Hausman Chi^2 1.35 (.98) ***			
	Breusch & Pagan Lagrangian multiplier test: $Chibar^2$: 448.4 (0) ***						Breusch and Pagan Lagrangian multiplier test: $Chibar^2$: 447.4 (0) ***					

Note: ESG- environment, social and governance disclosure, SC- sustainability committee, FA- firm age, BS- board size, FS- firm size, Sol- solvency, POLS- pooled ordinary least square, FE- fixed effect, RE- random effect and Cof- Coefficient.

We investigated the proposed Model 3 and Model 4 with the help of balanced panel data analysis by employing POLS, FE and RE models. In addition, we have tested Hausman specification test to choose best fitted model for our proposed hypothesis and the results found that for 3rd and 4th Model, the random effect (RE) is more suitable to describe the results.

Further, to choose RE or POLS, the study has conducted Breusch and Pagan Lagrangian multiplier test and confirmed that RE is more suitable model. Hence, we interpret only RE results for both models, in which Tobin Q is our dependent variable, ESG disclosure is our independent variable and sustainable committee as moderator.

The overall ESG disclosure has substantial effect on firm performance (Tobin Q) at p-value of 0.02 for Model 3 and at p-value of 0.02 for Model 4, which justifies that over all ESG disclosure substantially improve the firm performance. The stakeholders are satisfied when the firm disclose overall ESG information and leads to improve the overall firm performance, firm value and generating high capital to the firm. If the ESG disclosure increase with one unit means, there will be increase in firm performance/ firm value with 0.32 units and 0.44 units respectively. Hence, the study accepts proposed hypothesis one (H_3). Thus, these outcomes justify that disclosing ESG information integrates business operations and play substantial role in inducing stakeholder towards capital investment. Hence, by disclosing ESG information precisely, will create a positive brand image, improves supporting activities in society, which results to increase firm value or overall firm performance. The findings of our study substantially support the proposed theories i.e., signalling and stakeholders theory. The overall ESG score sends a signal to investors for positive investments in these firms and maintains healthy relationship with stakeholder groups. The firms with quality disclose of ESG information signals positive information to stakeholders (Orazalin et al., 2023). Likewise, when firm meets the expectations of stakeholder groups on disclose of ESG information's, the market reaps positively to users and improves firms' image (legitimacy) in the eyes of market investors. Our results are in support by the early studies of Velte (2017); Fatemi et al. (2018); Xie et al. (2019); Bhaskaran et al. (2020); Ahmad et al. (2021); Aydogmus et al. (2022) found that firms with more sustainable disclosure practice are positively affects the firm value.

The sustainable committee is positively associated with firm performance at p-value of 0.02 in Model 4, which denotes that firms with dynamic sustainable committees significantly contribute in improving firm value. If the sustainable committee is increases with one unit there will be an increase in firm performance/ firm value with 29.51 units. Most of the sample companies taken an initiative to create a sustainable committee that monitor all sustainable activities and recognised the need of the committee. Our findings are in line with early work, which also found board sustainable committee has significant influence on market value of selected companies (Orazalin et al., 2023).

The coefficient of interactive or moderative variable (ESG*SC) has insignificant association with Tobin Q/ firm performance at p-value of 0.11, which declares the moderator (ESG*SC) has not much effect on performance of firm. If the moderator (ESG*SC) disclosure increase with one unit means, there will be decrease in firm performance/ firm value with − 0.36 units. Therefore, this study does not accept our proposed hypothesis four (H_4). Though the sustainable committee is formed for novel approach, that could improve the firm performance, but it can be unsuccessful at reducing environmental risks and fails to improve the overall ESG performance. Our findings are in line with early work, which also found interactive variables like BSC*CCP and BSC*PBCCI (board sustainable committee*corporate carbon performance; board sustainable committee*process based corporate climate change initiative) has insignificant influence on market value of selected companies (Orazalin et al., 2023).

The firm size has significant and negative association with proposed dependent variable in all models, which indicates having larger firms do not assure good returns and firm performance. Even studies from Hirdinis (2019); Aydogmus et al. (2022) found firm size has insignificant association with firm performance and operational profits. Another control variable is financial leverage, which has insignificant relationship with profitability in Model 1& Model 2. Ibrahim and Isiaka (2020); Azzam et al. (2020); Aydogmus et al. (2022) found leverage have insignificant effect on profitability of the firm. In contrast the leverage has positive influence on firm performance at p-value of 0.03 for Model 3 and at p-value of 0.02 for Model 4. The firms with more sustainable information and committees are more likely to disclose quality information to stakeholders irrespective of debt providers restrictions. The firm age and board size has insignificant association with both firms' profitability and firms' performance all four models. The F-test and Wald Chi^2 test proved to be significant for all proposed models, which denotes that the chosen models are fit for evaluation and analysis.

6. Conclusions

Sustainable quality measurement disclosure has been an interesting topic in the present literature. The sustainability is a serious problem, that need to be examined by researchers because this issue belongs to firms' business operations and environmental, social and economic issues that have been improved in recent era. Especially, examining the outcomes and consequence of disclosing quality sustainable (over all ESG) information by the firm and received significant response from the practitioners. In the present study, we examined the impact of overall disclose of ESG information, interactive variable i.e., sustainability committee on the firm performance, measured using profitability (ROE), and Tobin Q. The study includes a purposive sample of Indian listed firms, during a period of four years i.e., 2018–2021 with 336 firm year observations. This study has found overall ESG disclosure has significant effect on Tobin Q and profitability. Whereas the interactive variable (ESG*SC) has significant impact on the firm's profitability (ROE) and insignificant association with Tobin Q. However, form theoretical aspects our results are supported by the stakeholder and signalling theories. The moderating (SC) variable has insignificant association with profitability in Model 2, whereas interaction of SC*ESG has insignificant association with Tobin Q in Model 4. On of the major findings is that most of the sample firms convert corporate social responsible committee as sustainable committee, changing the name does assure significant effect on profitability and firm performance. Hence, firms must consider suitable top managerial personnel who has more awareness on sustainable issues and through follow of sustainable committee activities, that could lead to quality disclose of sustainable information. Sometime investment projects related to sustainability might consume more time to complete, which might have impact on profitability and performance.

Our research findings substantially support to the improvement of current literature in following ways. First, to the best of authors knowledge, this is the first research study to examine the moderating role of sustainable committee in the association between ESG over all disclosure and firm performance & profitability in India. Second, this study examined only ESG overall disclosure score of Indian sample companies, so that outcomes are very reliable. Third, this study gains theoretical support and confined that theories positively influence our research results. Finally, this research work could be used a vital in framing regulations for Indian government, especially for boosting quality disclose of ESG score and formation of dynamic sustainable committees. As per tom management personnel, ESG score, and moderator can be an essential variable in articulating corporate strategies to enhance firms' performance.

Even though this study has significant contribution to literature, and this study possess few drawbacks. First, this study has not conducted generalized method of moments (GMM), which may be examined in future research work. Second, this study focused only the association between ESG overall score and profitability and firm performance with one moderator. So, there is a scope to develop future research by considering individual scores of ESG as independent variable with additional moderators. Third, this research work has concentrated only on limited Indian sample companies. Hence, the future work might be conducted across Asian countries or developing counties and examine real effect of ESG overall disclosure with performance.

Declarations

Author contribution Akhil searched the database, identified eligible studies, and wrote the manuscript. Suman has collected data and analyzed results. Lakshmana Rao read and wrote the manuscript. sankar wrote and checked the manuscript. All authors read and approved the final manuscript.

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Availability of data and materials

Data sharing is not applicable to this article as no datasets were generated or analyzed during the current study.

Ethics approval and consent to participate Not applicable.

Consent for publication Not applicable.

Competing interests The authors declare that they have no competing

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Figures

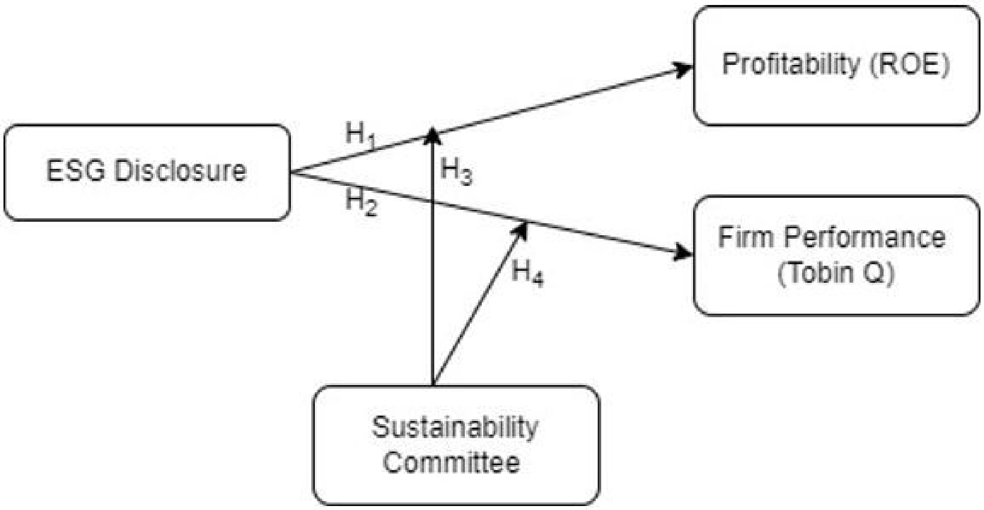

Figure 1

Conceptual framework of the study

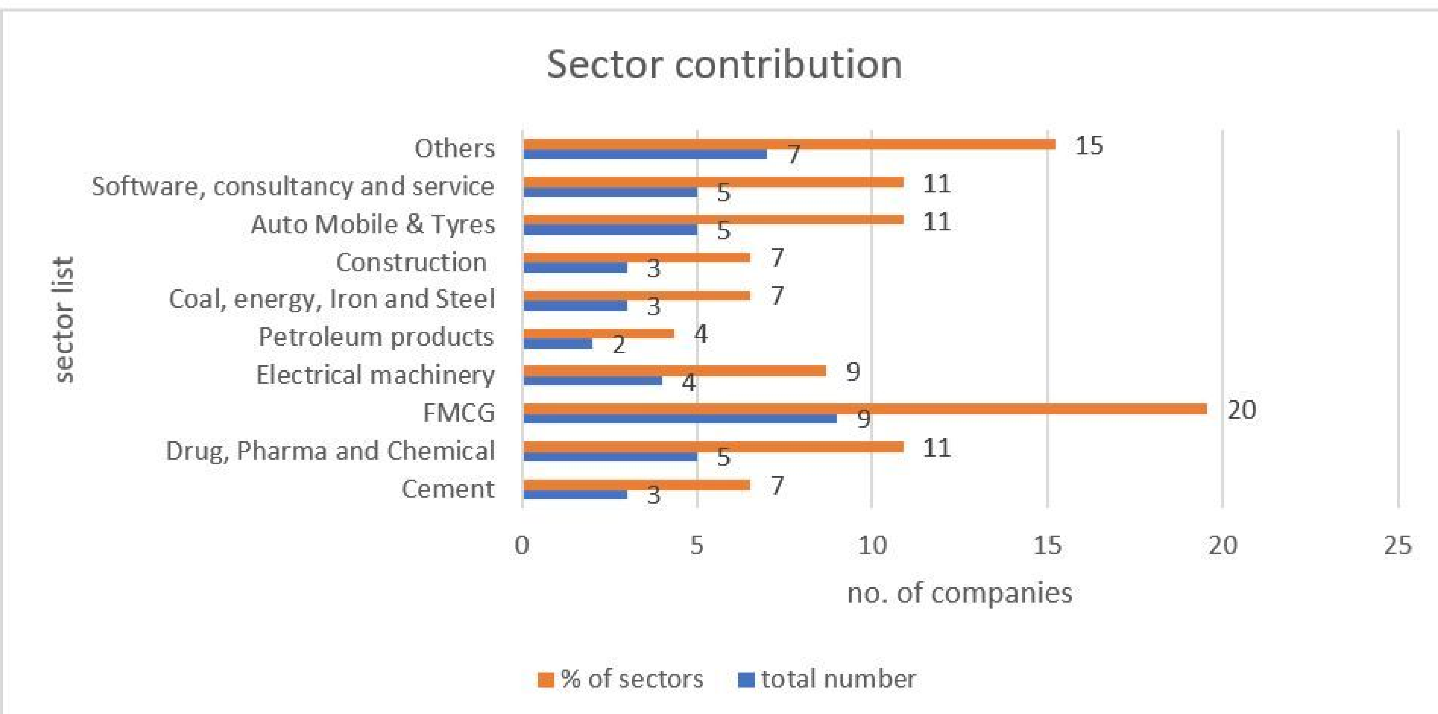

Figure 2

Presents sectorial contribution of sample companies