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I. Sridhar, Neha Singh, Abbas Seikh

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Independent directors and ESG – corporate governance in India

I. Sridhar*

Indian Institute of Management Indore,
Rau-Pithampur Road, Indore,
Madhya Pradesh, 453556, India
Email: isridhar@iimindr.ac.in
*Corresponding author

Neha Singh

Utkal University,
Vanivihar, Bhubaneswar, Odisha, 751004, India
Email: itsnehasingh25@gmail.com

Abbas Seikh

XLRI Jamshedpur,
Sonari, Jamshedpur, Jharkhand, 831001, India
Email: fb24003@astra.xlri.ac.in

Abstract: The institution of independent directors is viewed as custodians for good corporate governance practices both in the developed and developing world economies. Accordingly, regulatory jurisdictions have entrusted specific duties and responsibilities for independent directors. The purpose of the study is to empirically investigate the relationship between independent directors' role in ESG and thus their impact on firm performance in Nifty 100 index companies. The study reports that independent directors (ID) at the board and at the various committees of the board act as catalysts for enhancing the transparency and disclosures relating to ESG compliance. The study also highlights that independent director functioning enhances the efficacy and efficiency in terms of firm performance on various financial parameters and thus ensures credibility for ESG compliance. Our findings reveal that independent directors and the committees of the board have a significant positive relationship with ESG performance of the companies.

Keywords: environment, social and governance; ESG; independent directors; ID; environment, social and governance; ESG score; firm performance; committees of the board; India.

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Biographical notes: I. Sridhar is working as an Assistant Professor at IIM Indore. His teaching interests are in corporate and economic legislations; corporate governance and research interests are in corporate governance practices in India. He has widely published in prominent journals broadly in the areas of executive compensation, governance practices in India, board leadership.

Neha Singh has obtained her Master's in Sociology from Utkal University and specialisation in ethnography, tribal studies and sustainability. Her teaching research interests are in sociology and corporate sustainability issues in India. She has worked as academic and teaching associate at Indian Institute of Management, Indore. She has also presented many research papers at national and international conference organised by IRMA and IIMs (Raipur, Ranchi and Vizag).

Abbas Seikh has his obtained Master's in Commerce and also Master of Philosophy. His research interests are in accounting and finance; strategy and corporate governance. Presently, he is pursuing FPM from XLRI Jamshedpur in the Strategy Area. He has presented many research papers at IIM Indore, IIM Jammu and other national conferences.

1 Introduction

The impact of climate changes the world is experiencing today, has brought a new awakening and sensitivity among the corporates in crafting a new approach which has revolutionised disclosures and practices relating to environment, social and governance (ESG) (Townsend, 2020). Non-financial parameters such as sustainability, governance, social responsibility are the forerunners for assessing the corporate behaviour towards investors and other stakeholders (Cornell and Shapiro, 2020). Traditionally, corporate disclosures are principally directed by regulatory requirements which *prima facie* serve the shareholder's interest.

The objective of shareholder wealth maximisation and value maximisation has been superseded with ESG as a business proposition to achieve economic objectives. ESG Reporting by listed Indian companies is mandatory from financial year 2022–2023 which will be enforced by SEBI as a part of the disclosure and listing requirements (Saxena, 2022).

Today, ESG has become the priority for corporates world over (Jitmaneroj, 2016). It is primarily due to environmental degradation, lack of food security induced by climate change, waste management and recycling, fossil fuel-based power generation, growing world population and challenges of dealing with world hunger, etc. Therefore, addressing sustainability of the natural environment and social environment is the need of the hour for the corporates for their business (Basu, 2022). In this way, ESG has become an indispensable business proposition for its adoption (Esposito De Falco et al., 2021). Capital market regulators have attempted to give a formal structure for disclosures required for ESG but they are short on consensus about standards to be adopted across the world (Bassen and Kovács, 2020).

The key pillars of corporate governance are:

- 1 transparency and disclosure
- 2 accountability
- 3 protection of stakeholder interest
- 4 fairness and responsibility.

Therefore, corporates need to design an ESG framework and reporting which helps in strengthening governance and thus enhance firm performance in the long run (Kocmanová and Šimberová, 2014).

Prior studies noted wide divergence among ESG disclosures done by corporates. This is given due to the diverse nature of the industry. Companies in the respective industry give differential weightage to the various components of 'E', 'S' and 'G' and qualitatively improve upon ESG compliance within the broad framework provided by the regulation (Gholami et al., 2022).

2 Corporate governance – Indian context

Corporate governance reforms in India have evolved during the last two decades in line with governance reforms in the UK and US (Khan and Rehman, 2020). Code on corporate governance was first drafted at the behest of Confederation of Indian Industry (CII) under the leadership of Rahul Bajaj (Bhaumik, 2015). Subsequently, Securities and Exchange Board of India (SEBI) has constituted a committee under the leadership of K.M.Birla to codify the governance norms for listed companies. This was followed by a series of recommendations by NR Narayana Murthy Committee, Dr. JJ Irani Committee, Naresh Chandra Committee and Uday Kotak Committee on corporate governance reforms. Governance compliance for listed companies was introduced through clause 49 Listing agreement; SEBI (LODR) 2015 guidelines and Companies Act, 2013 (Singh, 2021). Today in the 21st century environment, corporates are increasingly measured on various non-financial parameters, primarily on Governance and Sustainability. Therefore, governance – which enhances accountability of the board of directors (BoD); – which protects the interests of clients – customers and employees; which protects the interest of various other stakeholders like environment, society, community development is rewarded with rich valuations and investors are willing to pay a premium for well managed and well governed companies (Shahzad et al., 2016). Thus, we can say that corporate governance practices call for an adoption of a combination of voluntary and legally mandated best practices by companies.

2.1 Independent directors

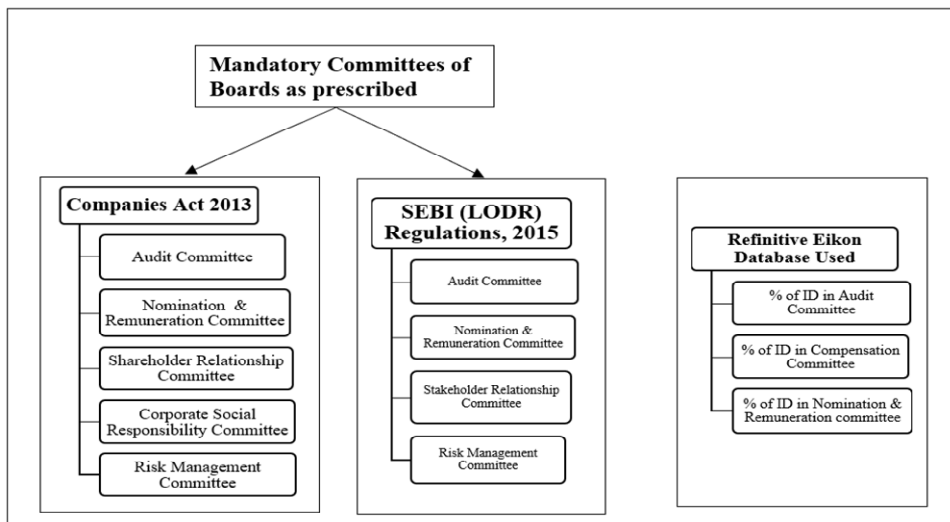
The presence of independent directors (ID) on company boards has become a legal requirement and is seen as a sign of good corporate governance (Fernández-Gago et al., 2018). Today, under the modern corporate structure, the CEO and other executives manage the corporation. The BoD are involved in the day-to-day operations of large companies. Basically, the board performs three primary functions: hiring the CEO and setting his/her compensation, monitoring the company's and management and contributing to the development of corporate strategy (Kolev et al., 2019). Therefore, the BoD function as the bridge-link between company investors and company management.

For ensuring effective monitoring of the management, the corporate governance system has entrusted this task to ID. Basically, ID is entrusted to ensure that the directors properly discharge their duties and effective monitoring of the management. The underlying theory behind this belief in ID for good corporate governance is that ID are better able to keep supervision on the CEO and other executives and, if necessary, take action to safeguard the interests of the company or its shareholders because they are disassociated from the company and its management (Cavaco et al., 2017). In this way, ID play an important role in assuring investor confidence.

2.2 Committees of the board

Indian Companies Act 2013, read with Section 149 (4) companies (appointment and qualification of directors) rules 2014 provides that for all listed public companies at least one-third of the total number of directors should be ID (Kumar, 2021). In all other cases, it provides for a minimum of two ID. SEBI (listing obligations disclosure requirements) 2015, provides for enhanced criteria for ID which is based on whether the Chairman of the board is executive or non-executive. Therefore, the institution of ID at company boards is dealt with by strict definition both by law and regulation in India. Additionally, the presence of Independence directors is mandated only for the audit committee, nomination and remuneration committee and corporate social responsibility committee.

Figure 1 Board committees under statute



Source: Authors

2.3 Environment, social and governance

Globally, ESG compliance has taken off in a big way but in India it is at a preliminary stage, and the regulator (SEBI) has introduced a new format for disclosure. It is known by the term business responsibility and sustainability reporting (BRSR Core). Initially, it is implemented for top 150 listed companies from the financial year 2024 and later

extended to the top 1,000 listed companies by financial year 2027 (Krueger et al., 2023). This new guideline is comprehensive and assurance based for environment related disclosures, detailing assurance on greenhouse gas emissions, Wastewater management, social standards measures and their assurances towards well-being of employees, wages and safety standards, etc. (Darnall et al., 2022). This BRSR core is business oriented based on a plan of action and thus ensuring transparency and disclosure as compared to the previous framework of BRSR.

There are multiple standards and reporting requirements dealing with ESG such as global reporting initiative (GRI), sustainability accounting standards board (SASB), BRSR, task force on climate related financial disclosures (TCFD) (Dye et al., 2021). Further, the international sustainability standard board has provided for integrated reporting of financial and non-financial parameters in a single report. Therefore, we observe that multiple standards and reporting requirements are available across jurisdictions and thus ESG compliance varies accordingly based on respective legal and regulatory requirements. Unless consensus among world bodies is reached, making a path for national level carve-out dealing with ESG compliance will be a difficult proposition for many of the companies going forward.

3 Literature review and hypothesis development

3.1 Dependent directors and ESG

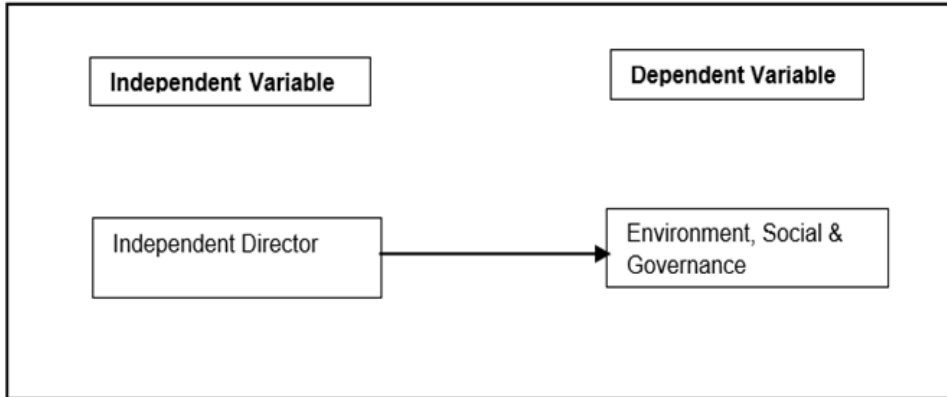
The presence of an ID on company boards has become an indicator of good governance, it has become imperative to formulate a precise definition of ‘independence’, which can serve to effectively identify persons who are truly free from constraint or influence by the corporation and its management. The primary objective of the concept of independence on the BoD is to accomplish shareholder accountability, information transparency, and increased shareholder/stakeholder participation in corporate decision-making (Gholami et al., 2022). Director independence is necessary to check ‘managerial capitalism’ by which managers bypass the BoD. Managerial capitalism occurs because dispersed shareholders lack both the incentives to provide effective oversight and the proximity to managers to detect self-dealing. Hence, ID are needed to function as a form of insurance against managerial self-dealing (Balasubramanian, 2017).

There is always the possibility of information asymmetry between the management and the shareholders, hence, ID at the Board can help achieve the information transparency (Fernández-Gago et al., 2018). This can ensure that management is not withholding or distorting information. Therefore, ID can act as an internal information-forcing mechanism. Thus, ID can seek information from the management which is both accurate and material to investors and can vouch for its credibility (Zaid et al., 2020). Another important function of an independent director is to increase shareholder voice/stakeholder voice in the governance of the company. In fact, ID at the board act as a negotiator with the management representing the interests of shareholders and stakeholders when there is a conflict. Thus, ID have many rights which enable them to call upon the board for due diligence; have the right to inspect the records of the company; review legal compliance reports prepared by the company and in cases of disagreement, record their dissent in the minutes (Mire, 2016).

Therefore, our first hypothesis is to study the impact of ID on ESG.

H1 Predicts that ID have a positive relationship to ESG score.

Figure 2 Relationship between independent director and ESG



Source: Authors

3.2 Board committees and ESG

According to Singhania and Saini (2023), for ESG compliance companies need to collate datasets from various sources which puts onerous responsibility on the BoD and thus it imposes governance challenges which company boards need to prepare. Secondly, the boards need to align ESG commitments with companies' business goals. Therefore, it makes a case for an exclusive committee of the board dealing with ESG compliance rather than realigning the portfolios among the various existing committees of the board. The best way to go forward on ESG compliance is to put in place an ESG charter which clearly outlines the duties and responsibilities of directors of the ESG committee (Alms, 2023). The genesis for the revolutionary approach towards ESG compliance is primarily because of the negative impact of climate change on company earnings and their valuation (Chouaibi and Zouari, 2022). Thus, the developed countries especially in Europe are in the forefront in their commitments towards ESG. In this way, ESG compliance has gradually become a global phenomenon. Without concerted efforts by world countries towards ESG, the intended goals cannot be realised by the corporates (Costantiello and Leogrande, 2023).

The biggest challenge for the corporate sector in this generation is 'sustainability' (Siew, 2015). In fact, sustainability should be ingrained in every functional aspect of the management for its execution with the help of digital technologies. Companies have a distinct responsibility towards environmental, social and governance considerations which need to be included as a part of a company's risk profile so as to accurately assess their impact on business. Therefore, for corporates to explore global opportunities businesses should gradually migrate to contemporary ESG disclosures and not just regulatory disclosures of the source country (Sætra, 2021). The various stakeholders in the ESG ecosystem must ensure reliability and transparency in their respective reporting frameworks. This can be ensured only by firm commitment to ESG values benefitting business, society and environment (Laermann, 2016).

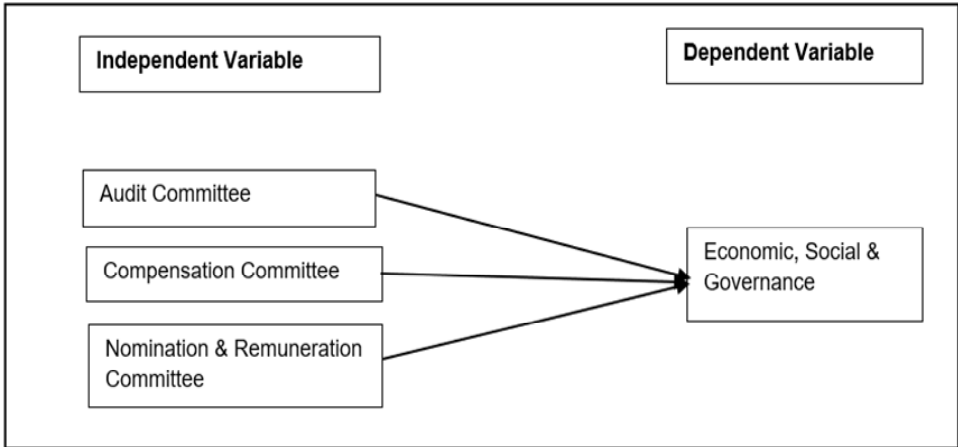
Corporate leadership should take ESG disclosures as instances to build strong businesses rather than as a compliance requirement for the regulators. Today, ESG has become a strategic requirement for sustainable development of business and growth which is beyond meeting the revenue targets but in achieving the net zero emissions, concern for the employees and the society and transparency in decision making (de Silva Lokuwaduge and Silva, 2020). With the passage of time ESG reporting requirements are evolving and also the expectations of different stakeholders from the company, one can expect standardisation in ESG disclosure formats, which may provide consistent and comparable reporting of ESG information. ESG scores are primarily given by global rating agencies, institutions and domestic rating institutions need to gear up to the opportunity provided for ESG rating for domestic listed companies in India (Gregory, 2022).

In the light of recent developments towards ESG compliance, it is clear that ID now play a central role in the ESG compliance and management (Romano et al., 2020). Therefore, it becomes essential to provide training for ID to achieve optimal levels of efficiency. ID necessarily had to be professionals with experience in the area of activity of the company. This would help them to discharge effectively their fiduciary duties (Jarwal and Mitali, 2021).

Therefore, our second hypothesis is to study the impact of various committees of the board on ESG.

H2 Predicts that committees of the board have a positive relationship to ESG score.

Figure 3 Relationship between board committees and ESG



Source: Authors

3.3 Independent directors and firm performance

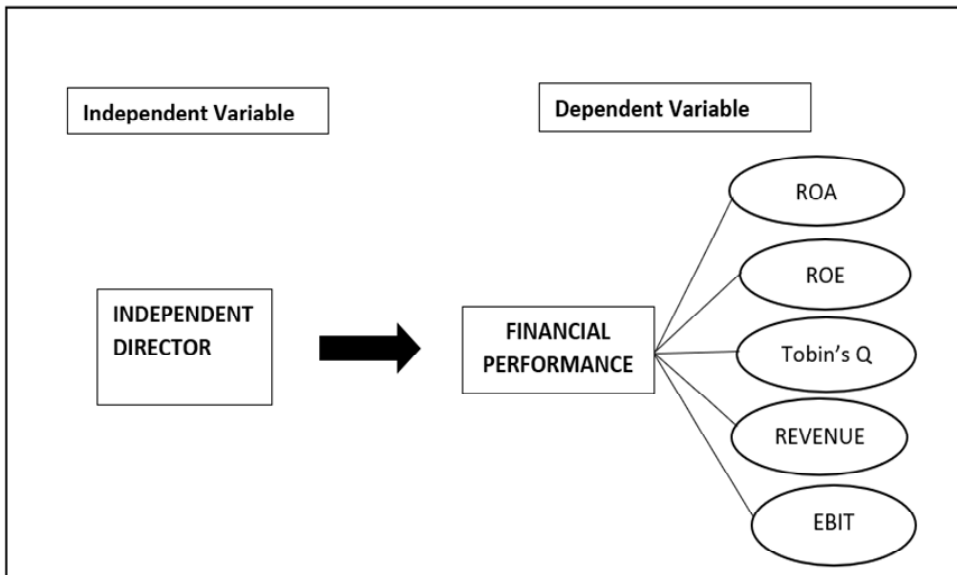
An ideal corporate BoD should comprise of executive, non-executive directors and ID. Each of these directors should possess appropriate skills and experience. Among these directors, ID occupy a unique position in the board and also in the various committees of the board due to their independent character and judgement (Fernández-Gago et al., 2016). Further, these ID do not have a material relationship with the company which

could affect their independent judgement. Therefore, it is the board's responsibility to determine if the director is independent or not (Rashid, 2015). The BoD has a collective responsibility and accountability on the overall financial performance of the company. It is true that no single director can be held liable towards shareholders or investors but the BoD including ID have a duty towards the company. In this context, it is empirically not possible to draw a bee line between the role of ID and firm performance but since ID are primarily entrusted to oversee good corporate governance practices, we can thus conclude that in the long run ID can help in improving firm performance (Merendino and Melville, 2019).

Therefore, our third hypothesis is to study the impact of percentage of ID on firm performance.

H3 Predicts that percentage of ID have a positive relationship with firm performance.

Figure 4 Relationship between independent directors and firm performance



Source: Authors

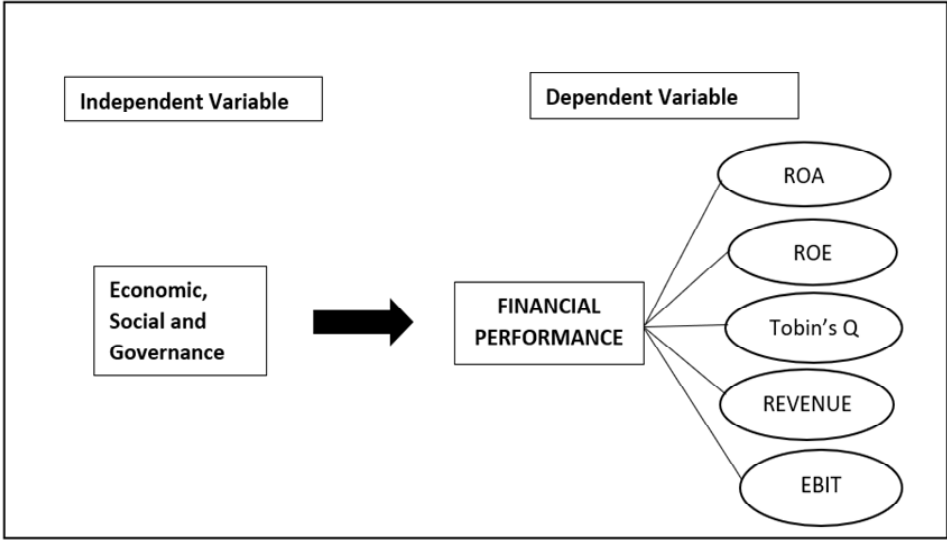
3.4 ESG and firm performance

ESG compliance requires commitment by companies in building capacities and putting in place internal controls and targets (Reis, 2022). To achieve this companies can use digital platforms for data collection, integration and reporting so as to cater the interest of various stakeholders. ESG compliance enables stakeholders to know how companies are earning revenues rather than how much of the revenue earned (Twinamatsiko and Kumar, 2022). The impact of ESG compliance by Indian companies will be different from that of European and American counterparts. The challenges are: large growing population, employment generation, food security, availability of water and power and infrastructure bottlenecks. Thus, to adopt global benchmarks for ESG compliance is definitely a challenge for Indian companies (Jha and Rangarajan, 2020).

Therefore, our fourth hypothesis is to study the impact of ESG on firm performance.

H4 Predicts that ESG has a positive relationship with firm performance.

Figure 5 Relationship between ESG and firm performance



Source: Authors

4 Data and empirical results

The study empirically investigates the role of ID in ESG compliance through various committees of the board and also the role of ID on firm performance of the company. Further, study is undertaken to assess the impact of ESG score on firm performance of the company in Nifty 100 Index companies starting FY 2012–2013 to 2021–2022. Data is collected from the Refinitive Eikon database and from annual reports. Stata 16 statistical software is used to generate necessary statistical tests. The tool used for analysis of the study is firm’s fixed effect regression model. Various assumptions of regression have also been tested such as multicollinearity, linearity and normality. After sorting the missing data (assumed as ‘0’ as missing data are less than 20% of total data observation) we recorded 1,000 observations during the years 2012–2013 to 2021–2022.

Descriptive statistics about financial performance measures such as ROA, ROE, EBIT, revenue, market capitalisation, Tobin’s Q and summary statistics for non-financial metrics such as board size, ESG score, percentage of ID in full board, percentage of ID in Audit committee, percentage of ID in compensation committee and percentage of ID in nomination committee.

Table 1 Summary statistics

<i>Variable</i>	<i>Obs</i>	<i>Mean</i>	<i>Std. dev.</i>	<i>Min</i>	<i>Max</i>
ROA	1,000	0.083	0.088	−0.137	0.348
ROE	1,000	0.162	0.182	−0.354	1.024
Tobin's Q	1,000	3.539	5.425	0	75.228
EBIT	1,000	7.945	1.238	−9.467	6.493
Revenue	1,000	6.0779	1.165	0	7.432
Market capitalisation	1,000	1.319	1.6060	0	9.030
% ID	1,000	37.052	25.492	0	81.818
% ID audit committee	1,000	59.507	40.4	0	100
% ID compensation committee	1,000	54.556	38.913	0	100
% ID nomination committee	1,000	65.179	43.588	0	100
ESG score	1,000	40.162	29.208	0	90.312
BoardSize	1,000	8.081	5.505	0	18

Notes: Table 1 shows summary statistics for all the related variables used in the study; data of Nifty 100 index companies is used for the period 2013–2022.

The institution of ID is kept in place primarily to address corporate governance issues at the board level. But with the advent of ESG compliance requirements by regulatory bodies, additional responsibilities were entrusted to ID. Therefore, our first hypothesis is to study the impact of the percentage of ID on ESG scores. The study finds that there is a significant positive relationship of ID on ESG scores of the companies (as β coefficient is 0.03***). It is a notable fact that ID directly influence ESG performance of companies. Therefore, we accept our research hypothesis. Our study provides empirical evidence that for companies to improve upon ESG score requires companies to improve upon the composition of BoD especially the ID and their proportion (Ajit et al., 2012). The essence of ESG compliance is realised if and only new board level positions are created in the form of 'ESG specialists' and functioning under the nomenclature of ID. The ESG specialists are inducted into the board primarily to design, implement and comply with ESG agenda for the company.

$$\begin{aligned} \text{ESG Score}_{jt} = & \beta_0 + \beta_1(\%ID)_{jt} + \beta_2(\%ID \text{ in Audit Committee})_{jt} \\ & + \beta_3(\%ID \text{ in Compensationcommittee})_{jt} \\ & + \beta_4(\%ID \text{ Nomination Committee})_{jt} + e_{jt} \end{aligned}$$

where, ESG score is dependent variable and independent variables are %ID, % ID audit committee, %ID compensation committee, %ID nomination committee

J indexes firms

t indexes time.

Table 2 Correlation matrix

Variables	(ROA)	(ROE)	(ESG)	(EBIT)	(% ID)	(% ID audit committee)	(% ID compensation committee)	(% ID nomination committee)	(tobinq)	(Revenue)	(MarketCap)	(BoardSize)
ROA	1.000											
ROE	0.832***	1.000										
ESG score	0.078**	0.031	1.000									
EBIT	0.123***	0.117***	0.393***	1.000								
% ID	0.111***	0.051*	0.822***	0.264***	1.000							
% ID audit committee	0.092***	0.047	0.860***	0.294***	0.906***	1.000						
% ID compensation committee	0.078**	0.038	0.804***	0.245***	0.890***	0.911***	1.000					
% ID nomination committee	0.066**	0.025	0.814***	0.232***	0.895***	0.899***	0.888***	1.000				
Tobin's Q	0.471***	0.421***	-0.029	-0.151***	0.024	0.013	0.013	0.036	1.000			
Revenue	-0.086***	-0.034	0.240***	0.439***	0.084***	0.176***	0.066**	0.094***	-0.172***	1.000		
MarketCap	0.137***	0.067**	0.475***	0.728***	0.392***	0.391***	0.344***	0.359***	0.083***	0.224***	1.000	
BoardSize	0.038	0.004	0.804***	0.379***	0.809***	0.850***	0.799***	0.856***	-0.061*	0.228***	0.399***	1.000

Notes: Table 2 shows the correlation matrix giving information about multicollinearity issues of all variables used in the study.
*** p < 0.01, ** p < 0.05, * p < 0.1

Table 3 Firm fixed effect regression of various board committees on ESG

<i>Variables</i>	<i>Model-1</i>	<i>Model-2</i>	<i>Model-3</i>	<i>Model-4</i>
%ID	0.328*** (0.0323)			
%ID audit committee		0.270*** (0.0201)		
% ID compensation committee			0.193*** (0.0184)	
% ID nomination committee				0.181*** (0.0187)
MarketCap	–0 (0)	–0 (0)	–0 (0)	–0 (0)
BoardSize	1.600*** (0.152)	1.252*** (0.147)	1.828*** (0.132)	1.626*** (0.155)
Constant	7.737***	6.767***	7.394***	8.657***
Year dummy is included (2013–2022)	Yes	Yes	Yes	Yes
Observations	1,000	1,000	1,000	1,000
R-squared	0.759	0.776	0.760	0.756
Number of companies	100	100	100	100

Notes: Table 3 shows the results of Hypothesis 1 and 2 with the significance level, i.e.,

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

As per Companies Act, 2013 and SEBI (LODR) guidelines, it is the requirement for public listed companies to constitute committees of the board, viz., audit committee, nomination and remuneration committee, CSR committee, stakeholder relationship committee and risk management committee. Since the BoD function through various committees of the board, our study attempted to look into the impact of the various committees of the board on companies ESG performance. The study finds that there is a significant positive relationship between the functioning of the committees of the board and the ESG score and the respective ' β coefficient' for audit committee is 0.02***; compensation committee is 0.0184***. Therefore, if a company aspires for improvement in ESG score, it is incumbent that the performance of the committees of the board should improve. Since, the relationship between committees of the board and ESG score is linear. ESG mandate and their impact is long term and permanent on stakeholders which results in financial implications for the company, the committees of the board are best positioned to contribute to ESG mandate.

The institution of ID are given the status of being torch-bearers for good corporate governance practices by regulatory bodies. There is no empirical evidence to prove the role of ID to financial performance of the company, thus our study is motivated to empirically investigate the impact of percentage of ID on the financial performance of the company. Financial performance of the company is measured through return on assets (ROA), return on equity (ROE), Tobin's Q, revenues, EBIT (Rossi et al., 2015). The study finds that there is no significant relationship between the percentage of ID on financial performance in the case of ROA (β coefficient is 0.000159), ROE (β coefficient

is 0.000439) and revenues (β coefficient is 1.697), but there is a significant positive relationship of the impact of ID on financial performance in the case of Tobin's Q (β coefficient is 0.0141*) and for EBIT there is a significant negative relationship between the percentage of ID on financial performance (β coefficient is 2.217***).

Table 4 Firm fixed effect regression of independent directors on firm's financial performance

<i>Variables</i>	<i>ROA</i>	<i>ROE</i>	<i>Tobins'Q</i>	<i>Revenue</i>	<i>EBIT</i>
%ID	0.000102 (0.000159)	0.000110 (0.000439)	0.0250* (0.0141)	-2.324 (1.697)	-6.707*** (2.217)
Market cap	0 (0)	-0 (0)	1.27*** (0)	0.0241 (0.0216)	0.0263*** (0.00283)
Board Size	0.000241 (0.00527)	-2.76 (0.0145)	0.0526 (0.491)	7.966 (5.618)	2.672** (7.340)
Constant	0.0804***	0.184***	0.284	4.670***	4.925***
Year dummy is Included (2013–2022)	Yes	Yes	Yes	Yes	Yes
Observations	1,000	1,000	1,000	1,000	1,000
R-squared	0.016	0.018	0.138	0.079	0.167
Number of Company	100	100	100	100	100

Notes: Table 4 shows the results of Hypothesis 3 with the significance level, i.e., *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

$$\begin{aligned}
 (\text{Firm's Financial Performance})_{jt} = & \beta_0 + \beta_1(\%ID)_{jt} \\
 & + \beta_2(\text{Market Capitalization})_{jt} + \beta_3(\text{Board Size})_{jt} + e_{jt}
 \end{aligned}$$

where, firm's financial performance, i.e., ROA, ROE, Tobin's Q, revenue and EBIT are dependent variables and; % ID is independent variable; market cap and board size are control variables.

ID play a variety of roles in the management and governance structure of the company. Financial performance of the company is primarily driven by quality management and leadership, and a host of controllable and uncontrollable factors, economic environment, market share, product competitiveness, service quality, etc. Further ID are in the position to provide financial oversight at the board level. It is for the executive directors and the CEO whose decisions and their execution primarily affects returns in the form of ROA, ROE and revenue. Therefore, we establish that the percentage of ID on the financial performance of the company in terms of ROA, ROE and revenue is limited. Capital structure decisions have a major impact on the financial performance of the company. Therefore, ID through various committees of the board especially the audit committee perform a vital role in these decisions. Leverage is fundamental to improvement of the earnings of the company and at the same time excess leverage can put earnings to risk. Therefore, our study has proven that in the financial indicator Tobin's Q, ID have a positive impact on the leverage decisions taken by the company board thus impacting firm valuation. The gross earnings of the company which are reflected in EBIT, our study shows that ID are not directly involved in the routine financial decisions which are usually handled by various functional heads of the management. Therefore, the supervisory role of the ID over the functional heads of the

management is not established in the corporate environment and thus our result shows a strong negative relationship in this instance.

Table 5 Firm fixed effect regression of ESG on firm's financial performance

<i>Variables</i>	<i>ROA</i>	<i>ROE</i>	<i>Tobins'Q</i>	<i>Revenue</i>	<i>EBIT</i>
ESG	−0.000291* (0.000156)	−0.00105** (0.000431)	−0.00496 (0.0142)	−7.813*** (1.652)	−5.235** (2.187)
MarketCap	0 (0)	−0 (0)	1.30*** (0)	0.0218 (0.0213)	0.0256*** (0.00282)
BoardSize	0.00145** (0.000628)	0.00337* (0.00173)	0.161*** (0.0562)	2.139*** (6.627)	1.625* (8.774)
Constant	0.0832*** (0.00542)	0.194*** (0.0149)	0.399 (0.505)	5.282*** (5.716)	5.191*** (7.568)
Years included as dummy (2012–2014 to 2021–2022)	Yes	Yes	Yes	Yes	Yes
Observations	1,000	1,000	1,000	1,000	1,000
R-squared	0.019	0.025	0.135	0.100	0.164
Number of company	100	100	100	100	100

Notes: Table 5 shows the results of Hypothesis 4 with the significance level, i.e., *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

$$\begin{aligned}
 (\text{Firm's FinancialPerformance})_{jt} = & \beta_0 + \beta_1 (\text{ESG Score})_{jt} \\
 & + \beta_2 (\text{Market Capitalization})_{jt} + \beta_3 (\text{Board Size})_{jt} + e_{jt}
 \end{aligned}$$

where, firm's financial performance, i.e., ROA, ROE, Tobin's Q, revenue and EBIT are dependent variables and; ESG score is independent variable; market cap and board size are control variables.

With the regulatory compliance for ESG coming into place as a part of listing requirement for companies, therefore ESG contributions are indirectly solicited by all listed companies. ESG contributions are not benchmarked with any financial parameters of the company but ESG score per se is greatly influenced by contributions made by the company towards ESG activities. We therefore attempted to study the impact of ESG score on financial performance. Our results show that ESG score has a low negative significance on ROA (β value is -0.000291) and ROE (β value is -0.00105) respectively and a strong negative impact on Revenues (β value is -7.81) and EBIT (β value is -5.23) respectively. The metrics for evaluating ESG performance by companies is reflected in ESG score, which in itself is a non-financial parameter. Therefore, the impact of ESG score will also be reflected in the form of non-financial benefits which accrue to the company over a longer period of time. Thus, it is improbable that an ESG score can have a significant positive impact on financial performance of the company. But ESG score is definitely an enabler in attracting investments from institutional investors, reducing cost of finance, improvement in the market share are the visible outcomes because of companies ESG contributions.

ESG Score has no impact on financial performance upon using Tobin's Q indicator (β value is -0.00496) but the firm valuation improves with improvement in the ESG

scores. Market capitalisation and board size are used as control variables in measuring the impact of ESG score in financial performance.

5 Findings and conclusions

The role of the BoD in general and ID in particular needs to be redefined in the context of ESG disclosure and compliance. Traditionally, regulatory bodies like SEC, SEBI, ESMA have mandated governance code implementation to be supervised by the BoD and ID are the principal enablers for good corporate governance practices. Now, with the ESG compliance in place, corporates will experience tremendous business risk in failing to meet the ESG mandate in the time to come. Therefore, this study has provided empirical evidence about the vital role ID play in ESG compliance and thus better financial performance. We note that ESG compliance is not centred around protecting stakeholders' interest only, in fact, corporates are bound to benefit from business expansion in terms of clients, markets and geographies because of ESG mandate. Using Nifty 100 Index companies' data, we have investigated the impact of ID on ESG score and firms financial performance; and the impact of ESG score on financial performance. We therefore conclude that ID have a positive and significant influence both on ESG score and firms financial performance. The legitimate concerns of the various stakeholders interested in ESG compliance are adequately addressed by strengthening the institution of ID at the board and also at the various committees of the board.

Our study brought new insights into the role ID plays in the governance of the company in general and ESG performance in particular. Companies' emphasis on ESG is bound to put pressure on prominent financial indicators. For ESG focussed companies, shareholder value maximisation goals will be impacted in the short run but will improve firm valuation in the long run. ESG performance by companies has many positive qualitative implications on various stakeholders - primarily, the environment and the society. This is a revolutionary shift in the focus for a company from being a shareholder / investor centric model to a stakeholder centric model, spearheaded by ESG compliance requirements the world over and India's corporate landscape is no exception. Today, for companies to survive and grow, the requirement is 'external capital' manifesting in the form of better natural environment and societal community development, otherwise, the impact of climate change can derail the economic agenda of countries and corporations with no chance for recourse. Thus, ESG focus should be high in the board agenda discussions and as the first order priority for companies in the years to come.

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Appendix A

Definition of variables

S.I. no	Variable	Definition
1	ROA	Return on assets (ROA). Net income after taxes for the fiscal period divided by the average total assets and is expressed as a percentage
2	ROE	Return on equity (ROE). Net income before extraordinary items for the fiscal period divided by the same period's average total equity and is expressed as a percentage
3	Tobin's Q	Market value of a company, i.e., market capitalisation with a total of debt divided by its assets. In formula it can be $\{(\text{market capitalisation} + \text{total debt})/\text{total assets}\}$
4	Revenue	Represents revenue from all the company's operating activities after deducting any sales and their equivalents
5	Market capitalisation	The company market capitalisation represents the sum of the market value of all relevant instrument-level share types. The instrument level market value is calculated by multiplying the requested share type by latest price
6	ESG score	ESG score is an overall company score based on the self-reported information in the environment, social and corporate governance pillars
7	%ID	Percentage of independent directors (ID) as reported by the company

Definition of variables (continued)

<i>S.I. no</i>	<i>Variable</i>	<i>Definition</i>
8	% ID on audit committee	Percentage of independent board members on the audit committee as stipulated by the company percentage of independent board members on the nomination committee as stipulated by the company
9	% ID compensation committee	Percentage of the independent board on the compensation committee as stipulated by the company
10	% ID nomination committee	Percentage of independent board members on the nomination committee as stipulated by the company