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ESG Performance and Multidimensional Corporate Risk: A Conceptual Framework and Research Propositions for Indian Firms in the BRSR Era

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Abstract

Purpose: The relationship between environmental, social and governance (ESG) performance and corporate risk is usually studied one risk at a time, which has produced fragmented and often conflicting findings. This paper develops an integrated conceptual framework that explains how ESG performance may affect four dimensions of corporate risk (market, liquidity, operational and legal risk) in Indian listed firms.

Design/methodology/approach: The paper is conceptual. It combines stakeholder theory, the risk-management (insurance) view, signalling theory and legitimacy-institutional theory with published evidence on ESG and firm risk to identify the mechanisms that link ESG to each risk dimension and the factors that condition these links.

Findings: The framework proposes four mechanisms (stakeholder trust and buffering, financing access, management quality, and disclosure and visibility) and derives ten research propositions. ESG is expected to lower market and operational risk, to have an uncertain effect on liquidity, and possibly to increase recorded legal risk under a self-disclosure regime such as the Business Responsibility and Sustainability Report (BRSR). The effects are expected to differ by ESG pillar, sector and firm size.

Originality/value: The paper offers a single, testable framework for multidimensional ESG-risk research in India and practical guidance on how to measure each construct using BRSR-era data.

Keywords: ESG; corporate risk; conceptual framework; market risk; liquidity risk; operational risk; legal risk; BRSR; India

How to Cite This Article

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Introduction

Interest in environmental, social and governance (ESG) issues has grown rapidly among investors, lenders, regulators and managers. A central question behind this interest is whether firms that perform better on ESG are less risky. If they are, ESG becomes not only an ethical choice but also a tool of risk management. If they are not, or if ESG reduces some risks while increasing others, investors and managers need a more careful understanding.

The empirical literature does not give a clear answer. Large reviews of ESG and financial performance report mostly positive results (Friede, Busch, & Bassen, 2015), but studies on risk are mixed. Some find that ESG reduces systematic risk, crash risk or default risk (Giese et al., 2019; Fiordelisi, Ricci, & Santilli, 2023; Zhang, 2025). Others find that ESG ratings are associated with higher systematic risk (Landi et al., 2022), stronger reactions to bad news (Sabbaghi, 2022) or higher short-run default risk (Gao et al., 2025). Evidence on liquidity is similarly divided, with ESG linked to lower cash holdings in some settings (Atif, Liu, & Nadarajah, 2022) and higher cash holdings in others (Yuan, Nor, & Kadir, 2025; Marie et al., 2024).

One reason for these mixed findings is that "risk" is treated as a single concept, while in practice firms face several different types of risk that arise from different sources. Market risk reflects how investors price the firm; liquidity risk reflects its short-term financial position; operational risk reflects the stability of its business; and legal risk reflects its exposure to regulators, courts and complainants. There is no reason to expect ESG to affect all of these in the same way. A second reason is that most studies do not explain clearly through which mechanism ESG should affect a particular risk, which makes it difficult to interpret conflicting results.

The Indian setting adds a further dimension. Since FY2022-23, the top 1,000 listed companies have been required to file a Business Responsibility and Sustainability Report (BRSR), which provides standardised ESG data including self-reported fines, penalties, complaints and safety incidents. This creates new opportunities for research, but also new measurement issues, because self-disclosed information may reflect transparency as much as actual conduct (Dhuri, Sinha, & Shukla, 2026; Tripathi et al., 2026). Indian research on ESG and risk has so far focused mainly on ESG indices (Meher et al., 2020; Negi et al., 2025; Malhotra, 2025) or on cost of debt and credit ratings (Arora & Sharma, 2022; Bhattacharya & Sharma, 2019).

This paper responds by developing an integrated conceptual framework for ESG and multidimensional corporate risk in Indian firms. Its objectives are:

1. To define the key constructs, ESG performance and four dimensions of corporate risk, in a way that can be measured with BRSR-era data.
2. To identify the theoretical mechanisms through which ESG may affect each risk dimension.
3. To develop testable research propositions, including the role of ESG pillars, sector and firm size.
4. To offer guidance on research design for empirical studies in India.

The paper contributes to the literature by moving from a "one risk at a time" view to a multidimensional view, by linking each risk dimension to a specific mechanism, and by adapting the framework to the Indian disclosure environment.

Approach of the Paper

This is a conceptual paper. It does not collect or analyse data. Instead, it follows a theory-synthesis approach: it brings together established theories and published empirical findings to build a framework and derive propositions that can be tested in future research. The empirical studies used were selected from the author's literature collection on ESG, risk, financing and disclosure, with an emphasis on studies that identify a mechanism or a boundary condition. Indian studies and studies from other emerging markets were given particular attention.

The paper proceeds in four steps. First, the constructs are defined. Second, four theoretical lenses are summarised. Third, mechanisms are identified and propositions are derived for each risk dimension and for the moderating factors. Fourth, measurement and research design issues are discussed.

Defining the Constructs

ESG Performance

ESG performance refers to how well a firm manages its environmental impact (for example, emissions, energy, water and waste), its social relationships (for example, employees, communities, customers and human rights) and its governance (for example, board structure, ethics, transparency and shareholder rights). ESG performance is usually measured through ratings or scores provided by rating agencies, which combine a large number of indicators into pillar scores (E, S and G) and an overall ESG score. Because the pillars capture different activities, the framework treats both the aggregate score and the individual pillars as relevant.

ESG performance should be distinguished from ESG disclosure. Disclosure refers to how much and how well a firm reports on ESG matters, while performance refers to what it actually does. The two are related but not the same, and studies have found that they can have different effects (Eliwa, Aboud, & Saleh, 2021; Nwaigwe et al., 2022).

Corporate Risk as A Multidimensional Construct

Corporate risk is defined here as the possibility that a firm's financial outcomes or value will deviate adversely from expectations. The framework distinguishes four dimensions.

Market risk is the sensitivity of a firm's stock returns to overall market movements, typically measured by beta, or the volatility of its stock returns. It reflects how investors perceive and price the firm's risk.

Liquidity risk is the risk that a firm cannot meet its short-term obligations. It is commonly measured by the current ratio and by cash holdings relative to total assets. Low liquidity is associated with a higher risk of corporate failure (Li, 2023), while firms with easy access to capital markets may choose to hold less cash (Opler et al., 1999).

Operational risk is the risk arising from the instability of a firm's core business, including disruptions, inefficiencies and failures of internal processes. At the firm level it can be captured by the volatility of operating earnings relative to assets, as in Deng et al. (2023).

Legal risk is the risk of fines, penalties, lawsuits, regulatory actions and formal complaints. It can be measured using litigation data, as in Badawi and Partnoy (2022), or, in India, using the legal and compliance items disclosed in the BRSR.

These four dimensions are related but distinct. A firm may have a low beta but volatile earnings, or strong liquidity but frequent regulatory penalties. Treating them separately allows a more precise understanding of how ESG matters.

Theoretical Foundations

Stakeholder Theory

Stakeholder theory holds that a firm's long-term success depends on its relationships with all stakeholders, not only shareholders. Firms that treat employees, customers, suppliers, lenders and communities well build trust and goodwill. These relationships can make the firm's cash flows more stable and can lead stakeholders to offer better terms, such as cheaper finance. Arora and Sharma (2022) use this argument to explain the lower cost of debt of Indian firms with higher ESG scores. Stakeholder theory therefore predicts that ESG reduces most types of risk.

Risk-Management (Insurance) View

The insurance view argues that ESG activities create moral capital that protects firm value when negative events occur. When a firm with a good ESG reputation faces a crisis, stakeholders are more likely to give it the benefit of the doubt. Rodella and De Giacomo (2023) find that firms taking concrete action on climate change received stronger market support during the uncertainty of the Brexit referendum. Giese et al. (2019) similarly show that ESG can reduce idiosyncratic and tail risk. This view predicts that ESG reduces downside and market risk, especially in turbulent periods.

Signalling and Information Asymmetry

Signalling theory focuses on the information gap between managers and outsiders. Credible ESG performance and disclosure signal management quality and long-term orientation, reducing information asymmetry. This can lower the cost of capital and improve access to finance. Naumer and Yurtoglu (2022) show that ESG news affects credit default swap spreads, and Lirou (2022) finds that ESG disclosure improves corporate financing. This view is especially relevant for liquidity risk.

Legitimacy and Institutional Theory

Legitimacy theory holds that firms seek to appear consistent with society's values, and institutional theory explains how regulation and norms shape corporate practices (Eliwa et al., 2021; Lee & Raschke, 2023; Oware & Mallikarjunappa, 2022). These theories suggest a different prediction for legal risk. Firms with high ESG profiles tend to be larger, more visible and more transparent, which may lead them to disclose more incidents and attract more scrutiny from regulators, media and activists. At the same time, weak regulation of ESG reporting creates scope for greenwashing (De Silva Lokuwaduge & De Silva, 2022), which can itself lead to legal exposure.

Table 1 summarises the predictions of the four theories.

Table 1. *Theoretical predictions for ESG and the four risk dimensions*

Theory	**Core argument**	**Market risk**	**Liquidity risk**	**Operational risk**	**Legal risk**
Stakeholder	Good	Lower	Better	Lower	Lower

theory	stakeholder relations build trust and stable cash flows		(cheaper finance)		
Insurance / risk-management view	ESG creates goodwill that buffers value in bad times	Lower (esp. in crises)	—	Lower	Lower reputational damage
Signalling theory	ESG reduces information asymmetry	Lower	Ambiguous (less need to hoard cash vs. better cash management)	—	—
Legitimacy / institutional theory	Firms disclose to appear legitimate; visibility attracts scrutiny	Ambiguous (window dressing)	—	—	Higher recorded legal risk

The Integrated Framework and Research Propositions

The framework links ESG performance to the four risk dimensions through four mechanisms and identifies three moderating factors. It is summarised in Table 2, and the propositions are developed below.

Mechanism 1: Stakeholder Trust and Buffering (Market Risk)
Investors price a firm's risk partly on the basis of how they expect it to perform in bad times. If ESG builds trust and goodwill, investors may see high-ESG firms as more resilient and less sensitive to market-wide shocks. Evidence from developed markets supports this view. Giese et al. (2019) report lower systematic risk for firms with better ESG ratings; Fiordelisi et al. (2023) find lower crash risk for European banks with greater environmental engagement; and Wang, Hu and Zhong (2023) find that high-ESG firms were less affected by negative market reactions to mandatory ESG disclosure.

However, the effect is not guaranteed. Landi et al. (2022) find that ESG ratings are associated with higher systematic risk among S&P firms, which they attribute to investor doubts about "window dressing", and Sabbaghi (2022) shows that ESG firms' volatility reacts more strongly to bad news. In emerging markets, Gupta and Chaudhary (2023) find that ESG indices offer better risk-adjusted returns in most countries but no downside protection in India. Indian firm-level evidence is limited; Meher et al. (2020) find only weak links between ESG scores and volatility. On balance, theory and most evidence suggest a negative relationship.

Proposition 1: ESG performance is negatively related to the market risk of Indian listed firms.

Mechanism 2: Financing Access (Liquidity Risk)
ESG may affect liquidity mainly through its influence on access to finance. Firms with stronger ESG performance face a lower cost of debt (Eliwa et al., 2021; Arora & Sharma, 2022), better credit ratings (Bhattacharya & Sharma, 2019) and narrower credit spreads after positive ESG news (Naumer & Yurtoglu, 2022). Global evidence also shows that higher ESG performance is associated with lower stock illiquidity (Rekabder et al., 2026).

Better access to finance has two possible effects on balance-sheet liquidity. On one hand, firms that can raise funds easily do not need to hold as much cash or as many liquid assets (Opler et al., 1999), so ESG may lead to lower cash holdings, as found by Atif et al. (2022). On the other hand, firms with stronger governance and internal control may manage working capital more carefully and hold more precautionary cash, as found by Yuan et al. (2025), Marie et al. (2024) and Yang, Liu and Su (2026). Ahmed and Abu Khalaf (2025) also show that cash holdings and ESG both contribute to firm value. Because these forces work in opposite directions, the framework does not predict a clear direction for aggregate ESG.

Proposition 2: ESG performance is significantly related to the liquidity of Indian listed firms, but the direction of the relationship is not determined a priori.

Mechanism 3: Management Quality (Operational Risk)

Good ESG practice often reflects good management more generally: careful supply-chain management, attention to workplace safety, fair treatment of employees, compliance systems and long-term planning. Such practices reduce the likelihood of disruptions, accidents, strikes, product failures and controversies, and should therefore make operating earnings more stable.

Evidence is consistent with this mechanism. Banks with fewer ESG controversies take less risk (Galletta & Mazzù, 2023); greater social-environmental transparency reduces stress on financial stability (De Moraes & de Mello, 2024); and reviews conclude that ESG factors generally support stability (Stolbov & Shchepeleva, 2022; Breitenstein, Nguyen, & Walther, 2021). Among non-financial and insurance firms, ESG is associated with lower default risk (Zhang, 2025; Miani, Mantovani, & Palmieri, 2026). Yasin (2025) also shows that earnings volatility and ESG performance are linked. Exceptions exist, such as the short-run increase in default risk for Chinese energy firms during the green transition (Gao et al., 2025), but these appear tied to specific sectors and time horizons.

Proposition 3: ESG performance is negatively related to the operational risk (earnings volatility) of Indian listed firms.

Mechanism 4: Disclosure And Visibility (Legal Risk)

The relationship between ESG and legal risk depends on what is being measured. If legal risk is measured by actual misconduct or lawsuits, good ESG practice should reduce it, because responsible firms are more likely to comply with laws. Badawi and Partnoy (2022) find that firms with poor ESG scores face more securities lawsuits, and Hoang (2018) argues that integrated reporting can reduce ESG and reputational risks.

Under a self-disclosure regime, however, the picture may differ. In the BRSR, firms report their own fines, penalties, complaints and incidents. High-ESG firms are likely to report more completely and honestly, and as larger and more visible firms they may also attract more regulatory attention. Tripathi et al. (2026) report that 23.12% of companies disclosed regulatory fines or penalties in FY2024-25, while Dhuri et al. (2026) find that the quality and completeness of BRSR disclosures vary. As a result, recorded legal risk may be higher, not lower, for high-ESG firms. Because both effects are plausible, the framework predicts a significant relationship without fixing its direction, while noting that the disclosure effect is likely to dominate when legal risk is measured from BRSR data.

Proposition 4a: ESG performance is significantly related to the legal risk of Indian listed firms.

Proposition 4b: When legal risk is measured from self-disclosed BRSR data, the relationship between ESG performance and recorded legal risk is more likely to be positive than when it is measured from independent litigation data.

Moderator 1: ESG Pillars

The aggregate ESG score combines very different activities, and each pillar is likely to work through different mechanisms. Environmental performance is closely related to regulatory exposure and investor perceptions of long-term risk; Landi et al. (2022) find that environmental ratings are linked to systematic risk, and Fiordelisi et al. (2023) highlight environmental engagement. Governance is likely to matter most for financial management and liquidity; Yang et al. (2026) find that governance has the strongest effect on cash holdings. Social performance relates to employees and communities and may affect operational stability; Zhang (2025) finds social and governance components significant for default risk, while Stolbov and Shchepeleva (2022) note that the social pillar is the least studied.

Proposition 5: The effects of ESG on corporate risk differ across pillars; the environmental pillar is more strongly related to market and legal risk, and the governance pillar is more strongly related to liquidity.

Moderator 2: Sector

Sector shapes both ESG performance and risk. Asset-light sectors such as information technology and financial services have smaller environmental footprints and often higher ESG ratings, while asset-heavy sectors such as construction and real estate face greater environmental and safety challenges. Sectors also differ in their inherent market, liquidity and operational risk. The ESG-earnings relationship changes sign across industries (Jangphanish & Boonyanet, 2026), and the ESG-risk relationship differs in the energy sector (Gao et al., 2025) and across types of banks (Zhou et al., 2022). Ignoring sector may therefore lead to spurious conclusions.

Proposition 6: The relationship between ESG performance and corporate risk varies across sectors, and part of the observed ESG-risk association reflects differences between sectors rather than differences between firms within a sector.

Moderator 3: Firm Size and Financial Constraints

Larger firms tend to have higher ESG scores, more analyst and media coverage, and easier access to finance. The benefits of ESG may therefore be larger for smaller firms, for which ESG can be an important signal to lenders. Bhattacharya and Sharma (2019) find that ESG affects credit ratings mainly for small and mid-sized Indian firms, and Sabbaghi (2022) shows that the volatility response of ESG firms to news varies with size. At the same time, larger firms are more visible and may face more legal scrutiny.

Proposition 7: The negative effect of ESG on market, liquidity and operational risk is stronger for smaller and more financially constrained firms, while the positive association with recorded legal risk is stronger for larger firms.

Time And Crisis Conditions

The insurance view suggests that the protective value of ESG is greatest in difficult times. Rodella and De Giacomo (2023) observe this during Brexit uncertainty, Yang et al. (2026) during COVID-19, and Malhotra (2025) finds that spillovers among Indian ESG indices increased during COVID-19 and the Russia-Ukraine conflict. Conversely, transition costs may make ESG costly in the short run (Gao et al., 2025).

Proposition 8: The risk-reducing effect of ESG is stronger during periods of market stress than during normal periods.

Summary Of the Framework

Table 2. *Summary of the integrated framework*

Risk dimension	**Main mechanism**	**Expected direction**	**Proposition**	**Key supporting studies**
Market risk	Stakeholder trust and buffering	Negative	P1	Giese et al. (2019); Fiordelisi et al. (2023); Wang et al. (2023); contrary: Landi et al. (2022)
Liquidity risk	Financing access	Not determined	P2	Eliwa et al. (2021); Arora & Sharma (2022); Atif et al. (2022); Yang et al. (2026)
Operational risk	Management quality	Negative	P3	Galletta & Mazzù (2023); Zhang (2025); Miani et al. (2026)
Legal risk	Disclosure and visibility vs. compliance	Significant; positive under self-disclosure	P4a, P4b	Badawi & Partnoy (2022); Tripathi et al. (2026); Dhuri et al. (2026)
Moderators	ESG pillar; sector; firm size; crisis periods	Effects vary	P5–P8	Landi et al. (2022); Jangphanish & Boonyanet (2026); Bhattacharya & Sharma (2019); Rodella & De Giacomo (2023)

In summary, the framework suggests that ESG is not a single "risk-reducing" factor but a set of practices that act on different risks through different channels. It is expected to reduce market and operational risk, to have an ambiguous effect on liquidity, and to be associated with higher recorded legal risk in self-disclosure settings. These effects are conditioned by pillar, sector, firm size and time.

Measurement and Research Design Guidance

To test the framework, empirical studies need careful measurement and design choices. Table 3 suggests measures for each construct using data available for Indian firms.

Table 3. *Suggested measurement of constructs for Indian firms*

Construct	**Suggested measure**	**Data source**
ESG performance	Overall ESG score and E, S, G pillar scores	ESG rating provider
Market risk	Beta against NIFTY 50 from monthly or daily returns; return volatility	NSE / BSE price data
Liquidity risk	Current ratio; cash and cash equivalents ÷ total assets	Annual reports
Operational risk	Standard deviation of quarterly EBITDA (or EBIT) ÷ opening total assets	Quarterly results
Legal risk	Index of BRSR legal and compliance items (fines, complaints, safety	BRSR reports

	incidents, environmental non-compliance)	
Controls	Firm size (ln total assets); leverage (total debt ÷ total assets); ROA; sector dummies	Annual reports
Moderators	Sector classification; size groups; crisis-period indicators	Exchange classification; market data

Several design issues deserve attention.

- Sector control. Because ESG scores and risks both differ strongly across sectors, studies should include sector controls or compare firms within sectors. Reporting results with and without sector controls helps show how much of the ESG-risk association is driven by sector.
- Control variables. Firm size, leverage and profitability affect both ESG performance and risk and should be included as controls. Size is especially important for legal risk because of the visibility effect.
- Pillar-level analysis. Studies should estimate models with both the aggregate ESG score and the individual pillars, and check for multicollinearity among pillars.
- Non-normal data and outliers. Risk measures such as beta, current ratio and earnings volatility are often skewed. Winsorization, robust standard errors and non-parametric checks are recommended.
- Financial firms. Liquidity measures such as the current ratio have a different meaning for banks and non-bank financial companies. Studies should test whether results hold when financial firms are excluded.
- Time dimension. Single-year studies cannot separate short-run and long-run effects or test the crisis proposition. As more BRSR years become available, panel data and event-study designs will allow stronger tests and better identification of causality.
- Legal-risk measurement. Researchers should be explicit about whether their legal-risk measure reflects actual legal events or self-disclosed incidents, and where possible should compare BRSR-based measures with independent sources.

Implications

Implications For Research

The framework offers a structure for organising future empirical work in India and elsewhere. By separating risk into four dimensions and linking each to a mechanism, it helps explain why previous results have been mixed and suggests which results to expect under which conditions. The propositions can be tested individually or together in a multi-equation design.

Implications For Investors

Investors should not assume that a high ESG rating means low risk in every sense. ESG may be a useful indicator of lower market and operational risk, but its link with liquidity is uncertain, and high-ESG firms may show more legal incidents in their BRSR because they disclose more. Comparing firms within sectors helps separate the effect of ESG from the effect of industry.

Implications For Managers

Managers can use the framework to understand which risks their ESG activities are likely to affect. Investments in safety, employee relations and supply-chain management are likely to stabilise operations; transparent reporting is likely to improve access to finance; but transparency also requires strong compliance systems, because disclosed incidents will be visible to investors and regulators.

Implications For Regulators

For SEBI and other regulators, the framework highlights the dual nature of self-disclosed legal information. Regulators could improve the usefulness of BRSR data by encouraging consistent definitions, extending assurance to legal and compliance items, and making it easier to distinguish the frequency of incidents from their severity.

Conclusion

This paper has developed an integrated conceptual framework linking ESG performance to four dimensions of corporate risk in Indian listed firms. Drawing on stakeholder theory, the insurance view, signalling theory and legitimacy-institutional theory, it identifies four mechanisms (stakeholder trust and buffering, financing access, management quality, and disclosure and visibility) and derives propositions on the direction of each relationship and on the moderating roles of ESG pillars, sector, firm size and time. The main message is that ESG and risk should be studied as a multidimensional relationship, because ESG can reduce some risks, leave others unchanged and make others more visible.

The paper has limitations. It is conceptual and does not test the propositions. The literature used is drawn from the author's collection rather than a systematic database search, and the mechanisms proposed are not exhaustive; other channels, such as investor composition or media attention, may also matter. Future empirical research using BRSR-era data from Indian firms can test the propositions, refine the framework and extend it to other emerging markets.

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