

Environmental, Social and Governance Risk in the Emerging Market: The Impact on ESG Performance

Dr. Pinku Paul<sup>1</sup>

<sup>1</sup>Management Development Institute Murshidabad, West Bengal

**Cite this paper as:** Dr. Pinku Paul, (2025) Environmental, Social and Governance Risk in the Emerging Market: The Impact on ESG Performance. *Advances in Consumer Research*, 2 (2), 503-518.

<b>KEYWORDS</b> <i>ESG Scores, ESG Risk, OLS-Regression, Emerging Market..</i>	<b>ABSTRACT</b> This study offers a vital comparative analysis of Environmental, Social, and Governance (ESG) Scores and ESG Risks, utilizing data from 196 Indian firms. Employing an Ordinary Least Squares (OLS) regression model effectively uncovers the relationship between ESG scores and ESG risks among these firms. The findings compellingly illustrate the differences in ranking between ESG scores and ESG risk. The study also reveals a critical inverse correlation: as a firm’s ESG score rises, its ESG risk diminishes. This emphasizes the urgent need for organizations to prioritize ESG initiatives, as it provides a strategic roadmap for minimizing ESG risk exposure. Such insights empower firms to make informed decisions that can significantly boost their ESG scores. Furthermore, the practical implications of this research are substantial for organizations, laying a foundation for decision-making that fosters sustainability and long-term success..
---	---

1. INTRODUCTION

Company attributes are essential drivers of performance and risk profiles. In today's investment landscape, non-financial information has taken center stage as investors prioritize sustainability in their decisions. Companies are increasingly evaluated based on their non-financial metrics, particularly their environmental, social, and governance (ESG) scores. The implications of ESG information on company performance and risk are not just a topic of debate; they are integral to shaping the future of responsible investment.

In recent years, the urgency for organizations to proactively evaluate their ESG practices has surged dramatically since the early 2000s (Huang, 2021). Sustainability is no longer a mere option; it has become a fundamental concern for many corporations (Lokuwaduge & Heenetigala, 2017). Companies are now compelled to create robust strategies that address pressing issues such as pollution, water consumption, and climate change. The literature on ESG initiatives is expanding rapidly, highlighting an adaptable landscape (Fijałkowska et al. 2018; Hang et al. 2019; Beck et al. 2018). As corporate social responsibility (CSR) evolves, both investors and companies recognize the importance of being socially responsible. This shift has heightened the appeal of sustainable investments, evidenced by the staggering net inflow of \$20.6 billion into U.S. sustainable funds in 2019—a figure that nearly quadrupled from the previous year (Morningstar Inc., 2020). Visionary investors understand that non-financial factors, including ESG issues, are vital to fostering a sustainable global economy (Jitmaneeroj, 2016). Embracing these principles is not just responsible, it's essential for long-term success.

While many previous studies have investigated the links between ESG performance, financial risk, and corporate performance, this study takes a different approach by focusing specifically on the relationship between ESG scores and ESG risk. By conducting a thorough comparative analysis, we aim to demonstrate how ESG risk impacts ESG performance. Utilizing data from Sustainalytics, we provide valuable insights into the significance of ESG risk values and their influence on overall ESG performance, making a compelling case for the importance of understanding these dynamics.

.



## 2. LITERATURE REVIEW

Globally, the performance of corporations in ESG metrics is becoming a crucial indicator of their dedication to environmental stewardship and social responsibility. ESG concerns play a vital role in assessing performance (Shakil, 2021; Gao et al., 2023). A corporation's ESG score not only reflects its ecological and social awareness but also signifies its proactive stance on minimizing risks associated with litigation and market volatility. Companies with robust ESG practices demonstrate a commitment to social and environmental accountability, which ultimately enhances investor confidence and reduces information asymmetry. Furthermore, the evaluation of ESG factors is increasingly utilized to measure corporate social performance (Zhan, 2023; Schommer et al., 2019). Firm risk, which encompasses the potential erosion of firm value due to uncertainties, is fundamentally linked to stock performance and market dynamics. Effective ESG disclosure offers vital insights to corporate management and potential investors, serving as a key asset that bolsters trust in the company's long-term sustainable growth (Попов and Makeева, 2022; Alsayegh et al., 2020). While many listed firms in China adhere to the Guidelines for Environmental Information Disclosure, it is concerning that some companies in environmentally sensitive sectors choose to selectively report their environmental data. This lack of transparency not only misleads investors but also escalates operational and financial risks (Wu and Håbek, 2021).

ESG scores are easily accessible and are increasingly recognized as a vital indicator of corporate sustainability performance (Drempetic et al., 2019). To fully grasp how they function, it is important to understand what ESG entails. The ESG score is broken down into three key areas, providing each company with distinct ratings for their environmental, social, and governance efforts. These scores not only reflect a company's commitment to sustainability but also influence investor decisions and consumer trust. Research by Eccles and Strohle (2019) indicates that companies embracing ESG practices are better positioned against systematic risk, leading to reduced overall risk exposure. Supporting this notion, Godfrey et al. (2009) and Oikonomou et al. (2012) affirm that firms with robust ESG frameworks typically face minimal risk. Despite these findings, Chen et al. (2023) point out that there is a scarcity of studies investigating the relationship between ESG and financial risk, revealing a significant opportunity for further research in this critical area. The risk mitigation perspective highlights the critical link between Environmental, Social, and Governance (ESG) factors and effective risk management, as outlined by Bouslah et al. (2018). Rooted in stakeholder theory, this viewpoint asserts that philanthropy can build moral capital, acting as a safeguard that protects shareholders' assets (Godfrey, 2005). Thus, ESG emerges as not just a compliance measure, but a powerful risk management tool that not only minimizes risks during crises but also shields the company from adverse impacts on its cash flow (Sharfman & Fernando, 2008). For companies with uncertain future earnings, the potential decline in firm value increases, thereby elevating overall risk (Sassen et al., 2016). Embracing ESG can lead to a more resilient and sustainable business strategy, offering long-term benefits for both the company and its stakeholders.

It was observed that after meticulously reviewing the literature, many studies were not conducted to understand the ESG score with the ESG risk and establish a relationship between both. The study formulated the following objectives:

To conduct a comparative study between the ESG score and the ESG risk and understand their difference.

To establish an empirical model to examine the relationship between the ESG score and ESG risk.

## 3. METHODOLOGY

The study's sample encompasses 196 Companies in the emerging market-India featured in the CRISIL-ESG 2022 report. Then, ESG risk data was acquired from Sustainalytics.com for companies belonging to 13 sectors. The company's sectors are listed in Table 1.

**Table 1: Companies sector-wise**

Sectors	Number of Companies
Auto OEM	9
Cement	12
Chemical	28
Consumer Electricals and Products	21
Lending	42
Logistics	7
Oil and Gas	12
Paints	5

Pharmaceuticals	30
Power	12
Telecom	6
Textiles	5
Tyre	6
Total	196

The ESG Score and ESG Risk of the 196 companies were then plotted on the graph for each sector. Then, the ranks of the ESG scores were calculated using the parameters in the CRSIL-ESG Report 2022. The rank was given concerning the classification of the ESG scores presented in Table 2.

**Table 2: Classification of Category and Rank as per ESG Score**

ESG Score	Category	Rank
Above 70	Leadership	1
61-70	Strong	2
46 - 60	Adequate	3
31- 45	Below Average	4
Below 31	Weak	5

Similarly, Sustainalytics.com has also classified the companies' ranks according to the ESG Risk Scores in Table 3.

**Table 3: Classification of Category and Rank as per ESG Risk**

ESG Risk Score	Category	Rank
0-10	Negligible Risk	1
10-20	Low Risk	2
20-30	Medium Risk	3
30-40	High Risk	4
40-50	Severe Risk	5

After that, the difference in rank was calculated to understand the companies' positions concerning the ESG Score and ESG Risk.

Further, the study tried to establish the relationship between the ESG Score and the ESK Risk by using the ordinary least square (OLS) regression. The study also uses the control variables size, growth rate, and the firm's leverage. The model reflects the following relationship:

$$esgscore = \alpha + \beta_1 esgrisk + \beta_2 size + \beta_3 growthrate + \beta_4 leverage + \varepsilon_{it}$$

For this purpose, data was extracted from CMIE prowess IQ and finally, the samples excluding the missing value resulted in 119 firms. The sample period was considered as 2021-2022.

### **Analysis and Results**

The descriptive analysis of the ESG Score and ESG Risk are presented in Table 4. The mean score of ESG Score was reported as 56.15 and ESG Risk was 26.75. The standard deviation was 7.45 for the ESG Score and slightly higher for the ESG risk,

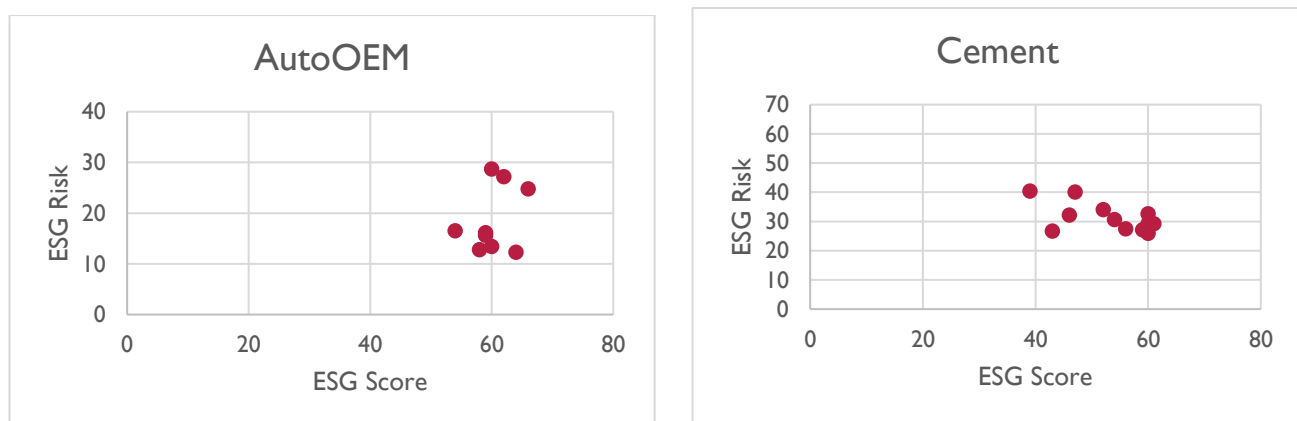
i.e., 7.66. The minimum ESG Score was 3 of the sample companies, whereas it was 10.60 concerning ESG Risk. The maximum ESG Score was reported as 73 and 44.80 for ESG Risk.

**Table 4: Descriptive summary**

Parameters	ESG Score	ESG Risk Score
Mean	56.15	26.75
Standard Deviation	7.45	7.66
Minimum	37	10.60
Maximum	73	44.80
Count	196	196

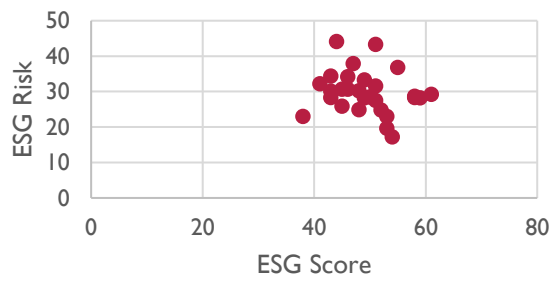
The ESG Score and ESG Risk were plotted for each sector presented in Figure 1. Nine companies were observed in the autoem sector, and the ESG score was between 54 and 66, and the ESG Risk was between 12.3 and 28.7. The next sector was the cement Sector, with twelve companies. The ESG score was between 43 and 61, and the ESG Risk was between 25.9 and 40.4 for the cement sector companies. The chemical sector had twenty-eight companies with an ESG score between 38 and 61 and an ESG Risk score between 17.2 and 44.1. The Consumer electrical and products sector had twenty-one companies with an ESG score between 43 and 64 and an ESG Risk between 13.3 and 33.4. The next sector was the lending Sector, with forty-two companies. The ESG score was between 56 and 73, and the ESG Risk was between 11.6 and 39 for the lending sector companies. The logistics sector had seven companies with an ESG score between 44 and 55 and an ESG Risk score between 10.6 and 33.9. The oil and gas industry had twelve companies with ESG scores between 47 and 63 and ESG Risk scores between 18.1 and 44.8. The paint industry had five companies with ESG scores between 50 and 71 and ESG Risk scores between 18 and 38.3. The next sector was the pharmaceuticals Sector, with thirty companies. The ESG score was between 49 and 68, and the ESG Risk was between 12.4 and 39.6 for the pharmaceuticals sector companies. The power sector had twelve companies with an ESG score between 37 and 66 and an ESG Risk score between 13.9 and 44.8. The telecom industry had six companies with ESG scores between 47 and 68 and ESG Risk scores between 21.1 and 33.9. The textile industry had five companies with ESG scores between 53 and 63 and ESG Risk scores between 11.5 and 38.7. The last sector was the tyre industry, with six companies. The ESG score and risk were between 49 and 59 and 13.1 and 23, respectively. Out of the 196 companies, the lending sector company had the highest ESG score of 73, and the power sector, precisely the thermal power company, had the lowest ESG score of 37. The logistics company has the lowest ESG Risk of 10.6, and the thermal power company reported the highest risk, with a 44.8 score. The relationship between the ESG Scores and the ESG risk sector-wise is presented in Figure 1.

**Figure 1: ESG Score and ESG Risk**

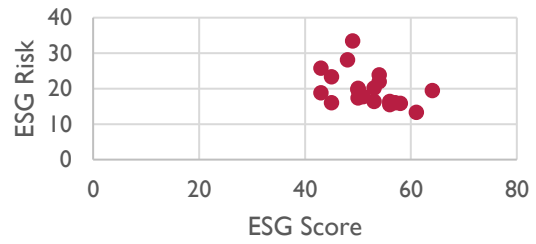




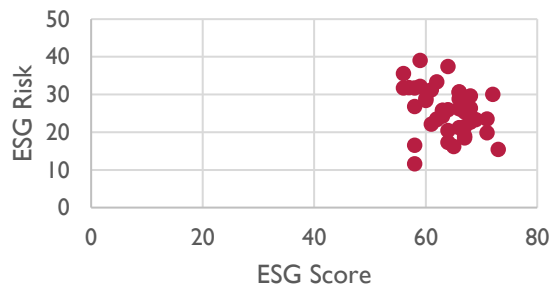
### Chemical



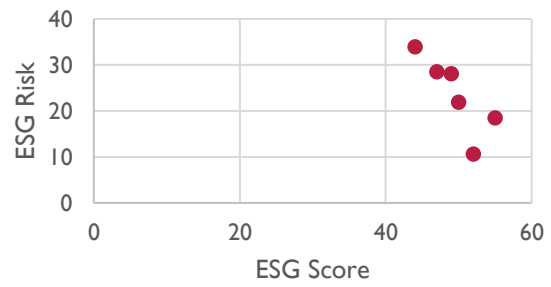
### Consumer Electricals and Products



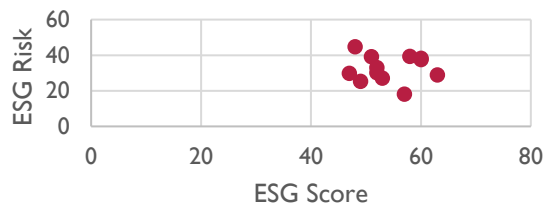
### Lending



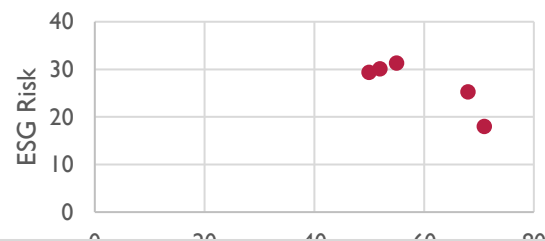
### Logistics



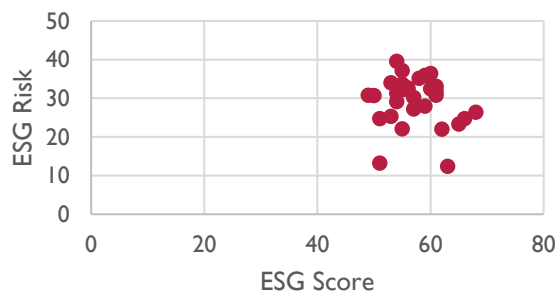
### Oil and Gas



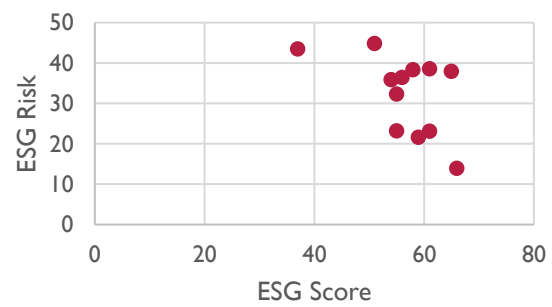
### Paints



### Pharmaceuticals



### Power



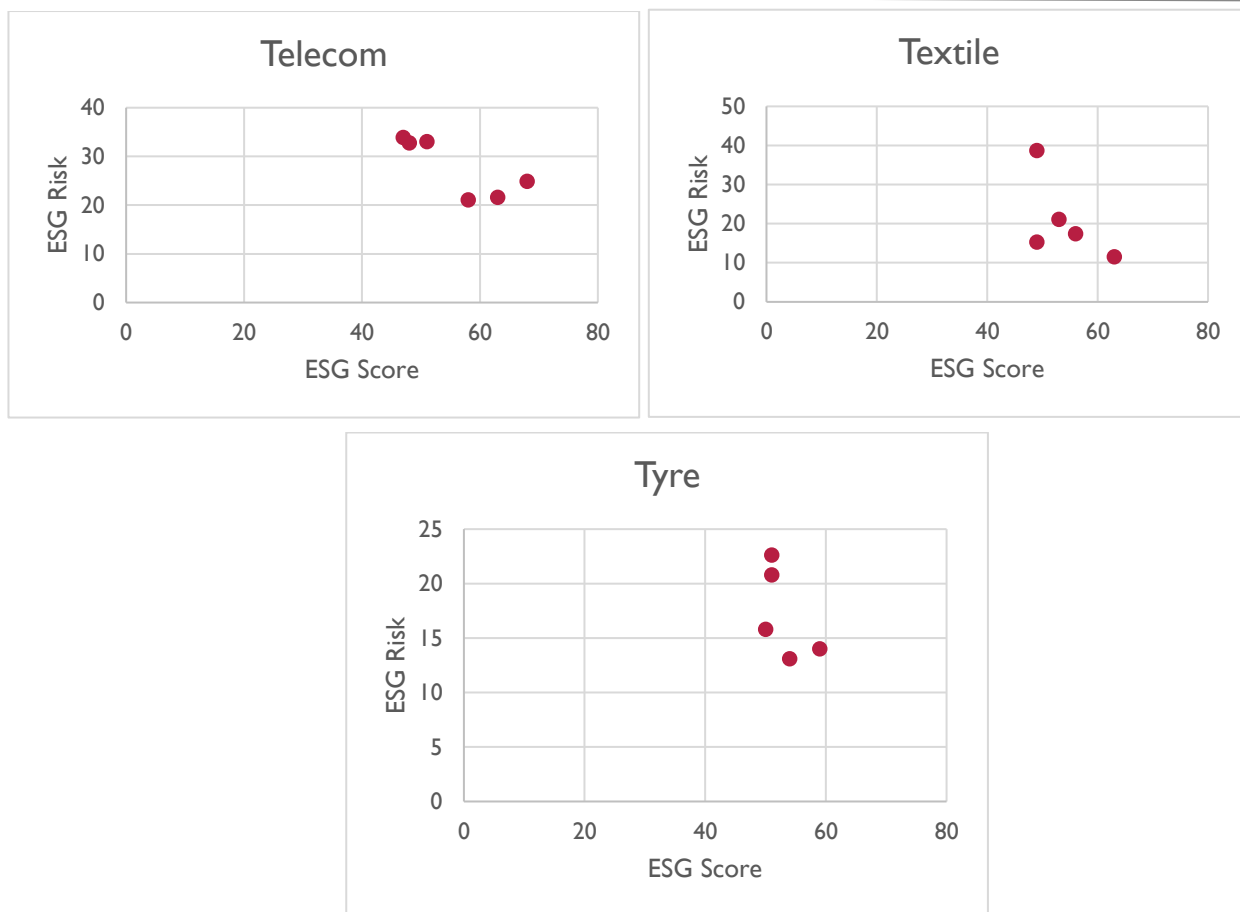


Table 5 presents the ESG Score Rank and ESG Risk Rank Company-Wise with Differences in Ranks. 43.88% of the companies reported a rank difference of zero. The lending sector had the highest number of companies, twenty-seven, followed by nineteen pharmaceutical and eight chemical companies. These companies showed consistency in maintaining the ESG Score and ESG Risk with no difference. After that, 37.76% of companies had a rank difference of one. The same phenomenon was observed in these cases, where the lending and chemical sector companies were highest, followed by pharmaceutical companies. Therefore, it can be concluded that the lending, pharmaceutical, and chemical sectors maintained consistent performance concerning the ESG Score and ESG Risk. Subsequently, the rank difference increased, but the percentage of companies was lower. 16.83% of companies had a rank difference of two. Consumer electronics and products had the highest number of nine companies in this difference, followed by chemical companies. The rank difference of three was observed by 1.53% companies which belongs to power consumer electricals and product sector.

**Table 5: ESG Score Rank and ESG Risk Rank Company Wise with Difference in Ranks**

Sl.No.	Company Name	Sector classification	ESG Score Rank	ESG Risk Rank	Difference
1	Ashok Leyland Limited	Auto OEM	3	1	2
2	Bajaj Auto Limited	Auto OEM	3	1	2
3	Eicher Motors Limited	Auto OEM	3	1	2
4	Escorts Kubota Limited	Auto OEM	3	1	2
5	Hero Motocorp Limited	Auto OEM	2	1	1
6	Mahindra and Mahindra Limited	Auto OEM	2	2	0
7	Maruti Suzuki India Limited	Auto OEM	3	2	1

8	Tata Motors Limited	Auto OEM	2	2	0
9	TVS Motor Company Limited	Auto OEM	3	1	2
10	ACC Limited	Cement	3	2	1
11	Ambuja Cements Limited	Cement	3	2	1
12	Birla Corporation Limited	Cement	3	4	1
13	Dalmia Bharat Limited- - formerly Odisha Cement Limited	Cement	3	2	1
14	Heidelberg Cement India Limited	Cement	3	2	1
15	JK Lakshmi Cement Limited	Cement	3	3	0
16	Prism Johnson Limited	Cement	3	3	0
17	Shree Cement Limited	Cement	2	2	0
18	Star Cement Limited	Cement	1	2	1
19	The India Cements Limited	Cement	1	4	3
20	The Ramco Cements Limited	Cement	3	3	0
21	UltraTech Cement Limited	Cement	3	3	0
22	Aarti Industries Limited	Chemical	3	2	1
23	Atul Limited	Chemical	1	3	2
24	BASF India Limited	Chemical	3	2	1
25	Bayer Cropscience Limited	Chemical	3	3	0
26	Chambal Fertilisers and Chemicals Limited	Chemical	3	4	1
27	Chemplast Sanmar Limited	Chemical	3	3	0
28	Clean Science and Technology Limited	Chemical	1	2	1
29	Coromandel International Limited	Chemical	3	3	0
30	Deepak Nitrite Limited	Chemical	3	3	0
31	Fine Organic Industries Limited	Chemical	1	3	2
32	Galaxy Surfactants Limited	Chemical	3	2	1
33	GHCL Limited	Chemical	3	2	1
34	Gujarat Narmada Valley Fertilizers and Chemicals Limited	Chemical	1	3	2



35	Gujarat State Fertilizers and Chemicals Limited	Chemical	3	3	0
36	Laxmi Organic Industries Limited	Chemical	1	2	1
37	Navin Fluorine International Limited	Chemical	3	3	0
38	Neogen Chemicals Limited	Chemical	3	3	0
39	PCBL Limited	Chemical	3	1	2
40	PI Industries Limited	Chemical	3	2	1
41	Pidilite Industries Limited	Chemical	2	2	0
42	Rallis India Limited	Chemical	3	2	1
43	Rossari Biotech Limited	Chemical	3	2	1
44	Sharda Cropchem Limited	Chemical	1	4	3
45	Sumitomo Chemical India Limited	Chemical	3	2	1
46	Tata Chemicals Limited	Chemical	3	2	1
47	Tatva Chintan Pharma Chem Limited	Chemical	1	3	2
48	UPL Limited	Chemical	3	1	2
49	Vinati Organics Limited	Chemical	1	2	1
50	Bajaj Electricals Limited	Consumer electricals	3	2	1
51	Crompton Greaves Consumer Electricals Limited	Consumer electricals	3	1	2
52	Finolex Cables Limited	Consumer electricals	1	2	1
53	Havells India Limited	Consumer electricals	2	1	1
54	Orient Electric Limited	Consumer electricals	3	2	1
55	Polycab India Limited	Consumer electricals	3	1	2
56	Symphony Limited	Consumer electricals	3	1	2
57	V-Guard Industries Limited	Consumer electricals	3	2	1
58	Aditya Birla Fashion and Retail Limited	Consumer Products	2	1	1
59	Arvind Fashions Limited	Consumer Products	3	1	2



60	Bata India Limited	Consumer Products	3	2	1
61	Go Fashion (India) Limited	Consumer Products	1	1	0
62	LA Opala R G Limited	Consumer Products	1	1	0
63	Lux Industries Limited	Consumer Products	3	1	2
64	Page Industries Limited	Consumer Products	3	1	2
65	Relaxo Footwears Limited	Consumer Products	3	1	2
66	Sheela Foam Limited	Consumer Products	3	3	0
67	The Supreme Industries Limited	Consumer Products	3	1	2
68	Titan Company Limited	Consumer Products	3	1	2
69	TTK Prestige Limited	Consumer Products	3	2	1
70	Vedant Fashions Limited	Consumer Products	1	2	1
71	AAVAS Financiers Limited	Lending	2	2	0
72	AU Small Finance Bank Limited	Lending	2	1	1
73	Axis Bank Limited	Lending	1	2	1
74	Bajaj Finance Limited	Lending	2	1	1
75	Bandhan Bank Limited	Lending	2	2	0
76	Bank of Baroda	Lending	2	2	0
77	Bank of India	Lending	2	3	1
78	Can Fin Homes Limited	Lending	2	3	1
79	Canara Bank	Lending	2	3	1
80	Cholamandalam Investment and Finance Company Limited	Lending	2	2	0
81	City Union Bank Limited	Lending	2	2	0
82	DCB Bank Limited	Lending	2	2	0
83	Equitas Small Finance Bank Limited	Lending	2	2	0
84	HDFC Bank Limited	Lending	1	3	2
85	Home First Finance Company India Limited	Lending	2	1	1

86	ICICI Bank Limited	Lending	2	2	0
87	IDBI Bank Limited	Lending	3	3	0
88	IDFC FIRST Bank Limited	Lending	2	2	0
89	IIFL Finance Limited	Lending	2	2	0
90	IIFL Home Finance Limited	Lending	2	1	1
91	Indiabulls Housing Finance Limited	Lending	3	2	1
92	Indian Bank	Lending	3	3	0
93	Indian Railway Finance Corporation Limited	Lending	3	2	1
94	JM Financial Products Limited	Lending	3	3	0
95	Kotak Mahindra Bank Limited	Lending	1	1	0
96	L&T Finance Limited	Lending	3	1	2
97	LIC Housing Finance Limited	Lending	2	3	1
98	Mahindra and Mahindra Financial Services Limited	Lending	1	1	0
99	Manappuram Finance Limited	Lending	2	2	0
100	MAS Financial Services Limited	Lending	3	2	1
101	Motilal Oswal Home Finance Limited	Lending	3	3	0
102	Muthoot Finance Limited	Lending	2	2	0
103	Piramal Enterprises Limited	Lending	3	1	2
104	PNB Housing Finance Limited	Lending	2	3	1
105	Punjab National Bank	Lending	3	3	0
106	RBL Bank Limited	Lending	2	2	0
107	Shriram Finance Limited	Lending	2	2	0
108	State Bank of India	Lending	2	2	0
109	Sundaram Finance Limited	Lending	2	2	0
110	The Federal Bank Limited	Lending	2	2	0
111	The Karur Vysya Bank Limited	Lending	2	2	0
112	Union Bank of India	Lending	3	3	0
113	YES Bank Limited	Lending	2	2	0



114	Adani Enterprises Limited	Logistics	1	3	2
115	Blue Dart Express Limited	Logistics	3	1	2
116	Container Corporation of India Limited	Logistics	3	2	1
117	Gateway Distriparks Limited	Logistics	3	2	1
118	Redington Limited	Logistics	3	1	2
119	TCI Express Limited	Logistics	3	2	1
120	VRL Logistics Limited	Logistics	3	2	1
121	Oil India Limited	Oil & Gas - E&P	3	3	0
122	Adani Total Gas Limited	Oil and Gas - Gas	3	1	2
123	Gail India Limited	Oil and Gas - Gas	2	2	0
124	Gujarat Gas Limited	Oil and Gas - Gas	3	2	1
125	Gujarat State Petronet Limited	Oil and Gas - Gas	3	2	1
126	Indraprastha Gas Limited	Oil and Gas - Gas	3	2	1
127	Mahanagar Gas Limited	Oil and Gas - Gas	3	3	0
128	Petronet LNG Limited	Oil and Gas - Gas	3	3	0
129	Bharat Petroleum Corporation Limited	Oil and Gas - OMC	3	3	0
130	Chennai Petroleum Corporation Limited	Oil and Gas - OMC	3	4	1
131	Hindustan Petroleum Corporation Limited	Oil and Gas - OMC	3	3	0
132	Indian Oil Corporation Limited	Oil and Gas - OMC	3	3	0
133	Akzo Nobel India Limited	Paints	3	3	0
134	Asian Paints Limited	Paints	2	2	0
135	Berger Paints India Limited	Paints	3	3	0
136	Indigo Paints Limited	Paints	3	2	1
137	Kansai Nerolac Paints Limited	Paints	1	1	0
138	Abbott India Limited	Pharmaceuticals	2	2	0
139	Advanced Enzyme Technologies Limited	Pharmaceuticals	3	3	0

140	Ajanta Pharma Limited	Pharmaceuticals	3	3	0
141	Alembic Pharmaceuticals Limited	Pharmaceuticals	3	3	0
142	Alkem Laboratories Limited	Pharmaceuticals	3	3	0
143	Astrazeneca Pharma India Limited.	Pharmaceuticals	3	2	1
144	Aurobindo Pharma Limited	Pharmaceuticals	2	3	1
145	Biocon Limited	Pharmaceuticals	2	2	0
146	Cipla Limited	Pharmaceuticals	2	2	0
147	Divis Laboratories Limited	Pharmaceuticals	3	3	0
148	Dr. ReddyS Laboratories Limited	Pharmaceuticals	2	2	0
149	ERIS Lifesciences Limited	Pharmaceuticals	3	3	0
150	Gland Pharma Limited	Pharmaceuticals	3	2	1
151	Glaxo Smithkline Pharmaceuticals Limited	Pharmaceuticals	3	2	1
152	Glenmark Pharmaceuticals Limited	Pharmaceuticals	3	3	0
153	Granules India Limited	Pharmaceuticals	3	3	0
154	Indoco Remedies Limited	Pharmaceuticals	3	3	0
155	IPCA Laboratories Limited	Pharmaceuticals	3	3	0
156	Jubilant Pharmova Limited	Pharmaceuticals	3	3	0
157	Laurus Labs Limited	Pharmaceuticals	3	3	0
158	Lupin Limited	Pharmaceuticals	3	3	0
159	Natco Pharma Limited	Pharmaceuticals	2	3	1
160	Pfizer Limited	Pharmaceuticals	3	2	1
161	Sanofi India Limited	Pharmaceuticals	3	2	1
162	Strides Pharma Science Limited	Pharmaceuticals	3	3	0



163	Sun Pharmaceutical Industries Limited	Pharmaceuticals	3	3	0
164	Suven Pharmaceuticals Limited	Pharmaceuticals	3	1	2
165	Syngene International Limited	Pharmaceuticals	2	1	1
166	Torrent Pharmaceuticals Limited	Pharmaceuticals	2	3	1
167	Zydus Lifesciences Limited	Pharmaceuticals	3	2	1
168	Adani Green Energy Limited	Power Renewable	2	1	1
169	NHPC Limited	Power Renewable	2	2	0
170	SJVN Limited	Power Renewable	2	3	1
171	CESC Limited	Power T&D	3	3	0
172	Power Grid Corporation of India Limited	Power T&D	3	2	1
173	Torrent Power Limited	Power T&D	3	3	0
174	Adani Power Limited	Power Thermal	3	3	0
175	JSW Energy Limited	Power Thermal	3	2	1
176	NLC India Limited	Power Thermal	3	4	1
177	NTPC Limited	Power Thermal	3	3	0
178	Reliance Power Limited	Power Thermal	1	4	3
179	The Tata Power Company Limited	Power Thermal	2	3	1
180	Bharti Airtel Limited	Telecom	2	2	0
181	Indus Towers Limited	Telecom	3	2	1
182	Railtel Corporation of India Limited	Telecom	3	3	0
183	Tata Communications Limited	Telecom	2	2	0
184	Tata Teleservices (Maharashtra) Limited	Telecom	3	3	0
185	Vodafone Idea Limited	Telecom	3	3	0
186	Arvind Limited	Textiles	3	1	2
187	Century Textiles and Industries Limited	Textiles	3	3	0
188	Gokaldas Exports Limited	Textiles	3	2	1

189	Vardhman Textiles Limited	Textiles	3	1	2
190	Welspun India Limited	Textiles	2	1	1
191	Apollo Tyres Limited	Tyre	3	1	2
192	Balkrishna Industries Limited	Tyre	3	2	1
193	Ceat Limited	Tyre	3	1	2
194	Goodyear India Limited	Tyre	3	1	2
195	JK Tyre and Industries Limited	Tyre	3	2	1
196	MRF Limited	Tyre	3	2	1

Table 6 reflects the result of OLS regression, where the dependent variable was the ESG score of the firms and the independent variable was the risk, with the control variables as the size, growth rate, and leverage of the firms. The model indicates the R-Square as 0.4011, explaining 40.11 percent of the variability of the dependent variable esgscore was explained by the independent variable, esgrisk. The esgrisk has a negative relationship with esgscore. The association was reported to be statistically significant. This indicates that the higher the ESG score of the firms, the lower the risk. The size of the firm is statistically significant with a positive relationship. However, the growth rate and leverage had an insignificant association with ESG score.

**Table 6: Regression Result**

Dependent variable	esgscore	
	Coefficient	P-value
esgrisk	-0.2656	0.001*
size	5.0412	0.000*
growthrate	0.5713	0.738
leverage	0.1887	0.653
Constant	39.9923	0.001
R-SQ	0.4011	0.000*
Prob>F	0.000	

Notes: \* 5 percent significance level

Source: authors' work

The esgrisk demonstrates an inverse relationship with esgscore, suggesting that as firms achieve higher ESG scores, their associated risks diminish. It was supported by Eccles and Strohle (2019), Godfrey et al. (2009), and Oikonomou et al. (2012). Chen et al. (2023) emphasizes that the limited inverse connection between ESG and risk.

#### 4. CONCLUSION

This study undertakes a comparative analysis of ESG scores and ESG risks clarifying their distinctions. Establishing an empirical model delves into the relationship between these two factors using data from 196 Indian firms, as detailed in the CRISIL-ESG 2022 report. The findings provide compelling evidence of a correlation between ESG scores and ESG risks, uncovered through robust OLS regression analysis. Significantly, the results reveal marked differences among companies in ESG Score Ranks and ESG Risk Ranks. Specifically, 43.88% of firms maintained a rank difference of zero, while 37.76% fluctuated by one rank, 16.83% by two ranks, and 1.53% by three ranks. Notably, the lending, pharmaceutical, and chemical sectors showcased a consistent performance regarding ESG scores and risks. The OLS regression results demonstrate a clear inverse relationship between risk and ESG score, indicating that their associated risks diminish as companies improve their ESG scores. This underscores ESG considerations' critical role in shaping risk factors and highlights the urgent need for organizations to adopt comprehensive ESG strategies. This study not only elucidates the essential link between ESG



performance and risk but also advocates prioritizing ESG initiatives to effectively mitigate risk exposure.

## REFERENCES

- [1] Alsayegh, M.F., Abdul Rahman, R., Homayoun, S., 2020. Corporate economic, environmental, and social sustainability Beck, Cornelia, Geoffrey Frost, and Stewart Jones. 2018. CSR disclosure and financial performance revisited: A cross-country analysis. *Australian Journal of Management* 43: 517–37.
- [2] Bouslah, K.; Kryzanowski, L.; M'Zali, B. Social Performance and Firm Risk: Impact of the Financial Crisis. *J. Bus. Ethics* 2018, 149, 643–669.
- [3] Chen, P., Dagestani, A.A., Kim, S., 2023. Corporate Social Responsibility and Green Exploratory Innovation-The Moderating Role of Three Environmental Regulations. *Technology Analysis & Strategic Management*, pp. 1–13.
- [4] Drempetic, Samuel, Christian Klein, and Bernhard Zwergel. 2019. The Influence of Firm Size on the ESG Score: Corporate Sustainability Ratings under Review. *Journal of Business Ethics* 167: 333–60.
- [5] Eccles, R.G., Strohle, J.C., 2019. Exploring Social Origins in the Construction of ESG Measures. Working paper.
- [6] Fijałkowska, Justyna, Beata Zyznarska-Dworczak, and Przemysław Garsztka. 2018. Corporate social-environmental performance versus financial performance of banks in Central and Eastern European Countries. *Sustainability* 10: 772.
- [7] Gao, S., Meng, F., Wang, W., Chen, W., 2023. Does ESG always improve corporate performance? Evidence from firm life cycle perspective. *Front. Environ. Sci.* 11, 103.
- [8] Godfrey, P.C. The Relationship Between Corporate Philanthropy And Shareholder Wealth: A Risk Management Perspective. *AMR* 2005, 30, 777–798.
- [9] Godfrey, P.C., Merrill, C.B., Hansen, J.M., 2009. The relationship between corporate social responsibility and shareholder value: an empirical test of the risk management hypothesis. *Strat. Manag. J.* 30 (4), 425–445.
- [10] Hang, Markus, Jerome Geyer-Klingeborg, and Andreas W. Rathgeber. 2019. It is merely a matter of time: A meta-analysis of the causality between environmental performance and financial. *Business Strategy and the Environment* 28: 257–73.
- [11] Huang, D. Z. X. (2021). Environmental, social and governance (ESG) activity and firm performance: A review and consolidation. *Accounting and Finance*, 61, 335–360.
- [12] Jitmaneeroj, Boonlert. 2016. Reform priorities for corporate sustainability: Environmental, Social, Governance or economic performance? *Management Decision* 54: 1497–521.
- [13] Lokuwaduge, C., & Heenetigala, K. (2017). Integrating environmental, social and governance (ESG) disclosure for a sustainable development: An Australian study. *Business Strategy and the Environment*, 26(4), 438–450.
- [14] Morningstar Inc. 2020. Sustainable Fund Flows in 2019 Smash Previous Records. Available online: <https://www.morningstar.com/articles/961765/sustainable-fund-flows-in-2019-smash-previous-records> (accessed on 10 February 2024).
- [15] Oikonomou, I., Brooks, C., Pavelin, S., 2012. The impact of corporate social performance on financial risk and utility: a longitudinal analysis. *Financ. Manag.* 41 (2), 483–515.
- [16] Sassen, R.; Hinze, A.-K.; Hardeck, I. Impact of ESG factors on firm risk in Europe. *J. Bus. Econ.* 2016, 86, 867–904.
- [17] Schommer, M., Richter, A., Karna, A., 2019. Does the diversification–firm performance relationship change over time? A meta-analytical review. *J. Manag. Stud.* 56 (1), 270–298
- [18] Shakil, M.H., 2021. Environmental, social and governance performance and financial risk: moderating role of ESG controversies and board gender diversity. *Resource. Policy.* 72, 102144.
- [19] Sharfman, M.P.; Fernando, C.S. Environmental risk management and the cost of capital. *Strat. Mgmt. J.* 2008, 29, 569–592.
- [20] Wu, X., Hąbek, P., 2021. Trends in corporate social responsibility reporting. The case of Chinese listed companies. *Sustainability* 13 (15), 8640.
- [21] Zhan, S., 2023. ESG and corporate performance: a review. In: *SHS Web of Conferences*, vol. 169. EDP Sciences, 01064.
- [22] Попов, К., Макеева, Е., 2022. Relationship between board characteristics, ESG and corporate performance:



---

a systematic review. Journal of Corporate Finance Research/Корпоративные Финансы| 16 (4), 119–134.  
ISSN: 2073-0438.

