



# **A Study on the Effect of Environment Social Governance Factors on Stock Market**

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## **ABSTRACT**

This study examines the sector-wise Environmental, Social, and Governance (ESG) performance of Nifty 50 companies from 2015 to 2023 and analyzes its impact on their stock prices. Despite the rising importance of ESG factors in investment decisions, the influence of these non-financial metrics on stock market performance remains under explored in the Indian context. The study addresses the need to integrate ESG considerations into the stock market by highlighting their role in risk management, investor demand for sustainable investments, and potential for long-term financial performance. The research employs secondary data, percentage analysis, correlation, and regression techniques to provide a comprehensive analysis of ESG trends and their financial implications. The findings reveal that while sectors like Finance & Insurance show a positive correlation between ESG scores and stock prices, others such as Automobile and FMCG exhibit a negative correlation. High ESG scores in sectors like Steel and Information & Communication Technology reflect strong sustainability practices but do not always correlate with higher stock prices, indicating the significant role of market conditions, financial performance, and brand loyalty. The study concludes that ESG scores should be considered alongside sector-specific dynamics and broader financial contexts, offering valuable insights for investors, policymakers, and corporate stakeholders. Despite the mixed impact on stock prices, ESG performance is increasingly important to investors prioritizing sustainability and ethical practices.

Keywords: ESG performance, Nifty 50 companies, stock prices, sustainable investments, sector-specific dynamics.

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## **1. INTRODUCTION**

The influence of Environment, Social, and Governance (ESG) factors on the stock market has become a focal point of interest for investors, analysts, and policymakers alike. This study seeks to explore and quantify the impact of ESG considerations on stock market performance. Environmental factors encompass a range of issues such as climate change policies, pollution levels, and resource management practices. Social factors delve into areas like labor relations, community engagement, and diversity within companies. Governance factors scrutinize corporate structures, transparency, and ethical standards guiding decision-making processes.

Understanding the interaction between these ESG factors and stock market dynamics is crucial for investors seeking to integrate sustainability considerations into their investment strategies. Furthermore, it provides valuable insights for companies aiming to enhance their ESG performance and thereby potentially improve their market valuation. Through rigorous analysis and empirical investigation, this study aims to elucidate the relationship between ESG factors and stock market outcomes. By shedding light on these connections, it endeavors to contribute to the growing body of knowledge surrounding sustainable finance and responsible investing practices..

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## **2. REVIEW OF LITERATURE**

Taleb and Kadhum (2024) review literature on ESG's role in enhancing financial performance, focusing on banking institutions. They find that ESG practices have a more significant impact on non-banking sectors than on banks.

Lel (2024) evaluates corporate revenues from environmentally friendly products, revealing a surge to US\$4.69 trillion. Foreign institutional ownership and executive compensation tied to ESG goals significantly boost green revenue intensity, driving a green transition.

Efthymiou et al. (2023) explore ESG application in India's service sector, highlighting technology's mixed impacts on sustainability efforts and signaling theory implications for firms.

Kulal et al. (2023) investigate the relationship between ESG factors and stock prices, emphasizing investors' prioritization of companies with strong ESG performance.

Naeem and Çankay (2022) analyze ESG performance's impact on global energy corporations, finding a significant correlation with profitability but a negative effect on market value.

Klint and Norell (2022) examine ESG scores' influence on Indian companies' stock performance, aiming to deepen understanding in the emerging Indian market.

Wilson (2021) researches the impact of global economic uncertainty on stock market performance, stressing the importance of diversification and risk management.

B and Deo (2021) empirically analyze the influence of macroeconomic indicators on India's stock market performance, highlighting varying impacts of different variables.

Davis (2019) investigates behavioral biases in stock market decision making, emphasizing the importance of addressing biases to improve decision-making processes and portfolio performance.

Dalal and Thaker (2019) assess the impact of ESG factors on Indian public limited companies' performance, finding that strong ESG performance enhances financial performance based on both accounting and market-based measures.

### 3. RESEARCH METHODOLOGY

#### 3.1. Objectives of Study

- To measure the impact of demographic variables on aesthetic considerations in the making of investment decisions.
- To determine the extent to which aesthetics influences pre-investment choices in financial assets.
- To investigate if recurrent investment behaviour is influencing post-investment behaviour.

#### 3.2. Sources of Data

Data collection is a standout amongst the most essential stages in carrying on research. Data collection begins with figuring out what sort of data is needed, followed by the collection of a sample from a certain section of the population. We can gather data from two sources namely primary and secondary. Data gathered through perception or questionnaire review in a characteristic setting are illustrations of data obtained in an uncontrolled situation. Secondary data is the data acquired from optional sources like magazines, books, documents, journals, reports, the web and more.

#### 3.3. Secondary Data

The study mainly uses secondary data to understand better the conceptual framework of investor investment in the primary market. The secondary data used in this study was gathered from a wide variety of sources, including national and international journals, newspapers, magazines, articles, research reports and other official records. By obtaining information from these sources, the study was able to gain insight into the broader context of the subject matter. The study was done on respective annual, sustainability, ESG reports of each nifty 50 companies.

#### 3.4. Data Analysis Tools

- Percentage Analysis
- Correlation
- Regression..

### 4. DATA ANALYSIS

**OBJECTIVE 1:** To study the sector wise ESG performance of Nifty 50 companies.

Table 4.1 Sectors wise ESG Average and Closing price Average

S.No	NIFTY 50	SECTOR	ESG Average	CP Average
	<b>SECTOR-1</b>			
1	Bajaj Auto Ltd	Automobile	17.44	3,502.89
2	Eicher Motors Ltd	Automobile	31.89	2,661.78
3	Hero MotoCorp Ltd	Automobile	42.22	3,057.56

4	Mahindra & Mahindra Ltd	Automobile	72	871.67
5	Maruti Suzuki India Ltd	Automobile	34.33	7,582.67
6	Tata Motors Ltd	Automobile	56.78	386.89
		<b>MEAN</b>	<b>42.44</b>	<b>3,010.57</b>
		<b>SD</b>	<b>19.4</b>	<b>2,335.56</b>
	<b>SECTOR-2</b>			
1	Axis Bank Ltd	Banking	52.11	685.33
2	HDFC Ltd	Banking	47.22	1,184.89
3	ICICI Bank Ltd	Banking	27.33	538
4	IndusInd Bank Ltd	Banking	57.33	1,271.00
5	Kotak Mahindra Bank Ltd	Banking	35.67	1,435.00
6	State Bank of India	Banking	27.44	377.78
7	Bajaj finance Ltd	Financial Services	22.33	4,022.56
8	Bajaj Finserv Ltd	Financial Services	22.33	927.44
9	HDFC Life Insurance Company Ltd	Insurance	21.22	437.33
10	SBI Life Insurance Company Ltd	Insurance	11.89	781
11	Shriram Fiance Ltd	NBFC	18.11	1,254.89
		<b>MEAN</b>	<b>31.18</b>	<b>1,174.11</b>
		<b>SD</b>	<b>14.92</b>	<b>1,011.61</b>
	<b>SECTOR-3</b>			
1	Grasim Industries Ltd	Cement	44.33	1,198.56
2	UltraTech Cement Ltd	Cement	53.89	5,306.89
3	Hindalco Industries Ltd	Metal	54.11	302.78
4	Coal India Ltd	Mining	23.22	246.44
		<b>MEAN</b>	<b>43.89</b>	<b>1,763.67</b>
		<b>SD</b>	<b>14.51</b>	<b>2,402.08</b>
	<b>SECTOR-4</b>			
1	Britannia Industries Ltd	FMCG	26	3,138.78
2	Hindustan Unilever Ltd	FMCG	41.78	2,052.78
3	ITC Ltd	FMCG	53	273.33
4	Nestle Ltd	FMCG	23.22	1,442.00
5	Tata Consumer Product Ltd	FMCG	28.11	478.67
		<b>MEAN</b>	<b>34.42</b>	<b>1,477.11</b>
		<b>SD</b>	<b>11.27</b>	<b>1,052.59</b>
	<b>SECTOR-5</b>			
1	Apollo Hospitals Enterprise Ltd	Health Care	24.44	2,672.78
2	Cipla Ltd	Pharmaceuticals	43.78	804

3	Divis Laboratories Ltd	Pharmaceuticals	20.44	2,422.22
4	Dr Reddys Laboratories Ltd	Pharmaceuticals	63.11	3,799.89
5	Sun Pharmaceuticals Industries Ltd	Pharmaceuticals	31.44	730.67
		<b>MEAN</b>	<b>36.64</b>	<b>2,085.91</b>
		<b>SD</b>	<b>15.43</b>	<b>1,172.62</b>
	<b>SECTOR-6</b>			
1	HCL Technologies Ltd	Information Technology	43.11	788.78
2	Infosys Ltd	Information Technology	71	1,017.22
3	LTIMindtree Ltd	Information Technology	23.11	2,992.11
4	Tata Consultancy Services Ltd	Information Technology	69.56	2,386.89
5	Tech Mahindra Ltd	Information Technology	80.33	1,556.67
6	Wipro Ltd	Information Technology	80.67	342
7	Bharti Airtel Ltd	Telecommunication	60.89	548.78
		<b>MEAN</b>	<b>61.24</b>	<b>1,376.06</b>
		<b>SD</b>	<b>21.17</b>	<b>991.07</b>
	<b>SECTOR-7</b>			
1	NTPC Ltd	Power	35.22	149.78
2	Power Grid Corporation of India Ltd	Power	25.67	158.67
		<b>MEAN</b>	<b>30.44</b>	<b>154.22</b>
		<b>SD</b>	<b>6.76</b>	<b>6.29</b>
	<b>SECTOR-8</b>			
1	Larsen & Toubro Ltd	Engineering	46.22	1,613.89
2	Adani Ports & Special Economic Zone Ltd	Infrastructure	37	526.11
		<b>MEAN</b>	<b>41.61</b>	<b>1,070.00</b>
		<b>SD</b>	<b>6.52</b>	<b>769.18</b>
	<b>SECTOR-9</b>			
1	Oil & Natural Gas corporation Ltd	Oil Exploration	21.89	156.56
2	Bharat Petroleum Corporation Ltd	Refineries	39.78	404
3	Reliance Industries Ltd	Refineries	36.78	1,563.33
		<b>MEAN</b>	<b>32.81</b>	<b>707.96</b>
		<b>SD</b>	<b>9.58</b>	<b>751.03</b>
	<b>SECTOR-10</b>			
1	JSW Steel Ltd	Steel	56.89	419.89

2	Tata Steel Ltd	Steel	68.56	73.44
		<b>MEAN</b>	<b>62.72</b>	<b>246.67</b>
		<b>SD</b>	<b>8.25</b>	<b>244.97</b>
	<b>SECTOR-11</b>			
1	Asian Paints Ltd	Paints	27.89	28.43
2	Titan Company Ltd	Jewellery	24.78	1,548.22
3	Adani Enterprises Ltd	Trading	18.89	1,061.00
		<b>MEAN</b>	<b>23.85</b>	<b>879.22</b>
		<b>SD</b>	<b>4.57</b>	<b>776.03</b>

The ESG Scores were obtained from the S&P Global ESG metrics Agency

The Closing prices of stocks were obtained from the Upstox trading app

**OBJECTIVE 2:** To analyse the impact of ESG performance on Stock prices of Nifty 50 companies.

Therefore, 5 basic sectors have been analysed which consists of a greater number of firms. The sectors chosen are:

1. Automobile
2. Finance & Insurance
3. FMCG
4. Pharmaceuticals & Healthcare
5. Information & Communication Technology

#### **CORRELATION:**

Table: 4.2 Correlation of Automobile sector

		<b>RB_Mean</b>	<b>Mean_Mean</b>
<b>ESG1_N</b>	Pearson Correlation	1	-.688
	Sig.(2-tailed)		.199
	N	5	5
<b>Mean_Mean</b>	Pearson Correlation	-.688	1
	Sig.(2-tailed)	.199	
	N	5	5

There is a moderate to strong negative correlation between ESG 1\_N and CP 1\_N ( $r=-0.688$ ), but this correlation is not statistically significant ( $p = 0.199$ ). The small sample size ( $N = 5$ ) limits the conclusions that can be drawn from this analysis. Further investigation with a larger sample size may be necessary to confirm these findings.

Table: 4.3 Correlation of Finance and Insurance

		<b>RB_Mean</b>	<b>Mean_Mean</b>
<b>ESG_N</b>	Pearson Correlation	1	.412
	Sig.(2-tailed)		.491
	N	5	5
<b>CP2_N</b>	Pearson Correlation	.412	1
	Sig.(2-tailed)	.491	
	N	5	5

The correlation matrix presented shows the relationship between ESG 2\_N and CP 2\_N. The Pearson correlation coefficient between ESG 2\_N and CP 2\_N is 0.412, indicating a moderate positive correlation. However, the p-value (Sig. 2-tailed) for this correlation is 0.491, which is greater than the typical significance level of 0.05. This means that the correlation is not statistically significant, and we do not have enough evidence to assert a significant relationship between ESG 2\_N and CP 2\_N. The sample size for both variables is 5, which is relatively small and may affect the robustness of the results. Further analysis with a larger sample size would be beneficial to confirm these findings.

Table: 4.4 Correlation of FMCG sector

		<b>RB_Mean</b>	<b>Mean_Mean</b>
<b>ESG4_N</b>	Pearson Correlation	1	-.429
	Sig.(2-tailed)		.471
	N	5	5
<b>CP4_N</b>	Pearson Correlation	-.429	1
	Sig.(2-tailed)	.471	
	N	5	5

The correlation matrix presented examines the relationship between ESG 4\_N and CP 4\_N. The Pearson correlation coefficient between ESG 4\_N and CP 4\_N is -0.429, indicating a moderate negative correlation. However, the p-value (Sig. 2-tailed) for this correlation is 0.471, which is greater than the common significance level of 0.05. This indicates that the correlation is not statistically significant, and we do not have sufficient evidence to state that the correlation between ESG 4\_N and CP 4\_N is significantly different from zero. The sample size for both variables is 5, which is small and could affect the reliability of the results. Further research with a larger sample size would be necessary to validate these findings.

Table: 4.5 Correlation of Healthcare &amp; Pharmaceuticals sector

		<b>RB_Mean</b>	<b>Mean_Mean</b>
<b>ESG5_N</b>	Pearson Correlation	1	.339
	Sig.(2-tailed)		.577
	N	5	5
<b>CP5_N</b>	Pearson Correlation	.339	1
	Sig.(2-tailed)	.577	
	N	5	5

The correlation matrix shows the relationship between ESG 5\_N and CP 5\_N. The Pearson correlation coefficient between ESG 5\_N and CP 5\_N is 0.339, indicating a weak positive correlation. The p-value (Sig. 2-tailed) for this correlation is 0.577, which is greater than the standard significance level of 0.05. This means that the correlation is not statistically significant, suggesting that there is not enough evidence to assert a meaningful relationship between ESG 5\_N and CP 5\_N. The sample size for both variables is 5, which is relatively small and may affect the strength and reliability of the results. Further investigation with a larger sample size would be needed to confirm these findings.

Table: 4.6 Correlation of Information &amp; Communication Technology sector

		<b>RB_Mean</b>	<b>Mean_Mean</b>
<b>ESG6_N</b>	Pearson Correlation	1	.005
	Sig.(2-tailed)		.994
	N	5	5
<b>Mean_Mean</b>	Pearson Correlation	.005	1
	Sig.(2-tailed)	.994	
	N	5	5

The correlation matrix shows the relationship between ESG 6\_N and CP 6\_N. The Pearson correlation coefficient between ESG 6\_N and CP 6\_N is 0.005, indicating an extremely weak positive correlation. The p-value (Sig. 2-tailed) for this correlation is 0.994, which is much greater than the standard significance level of 0.05. This indicates that the correlation is not statistically significant, and there is no meaningful relationship between ESG 6\_N and CP 6\_N. The sample size for both variables is 5, which is small and can limit the reliability and generalizability of the results. Further analysis with a larger sample size would be required to draw more definitive conclusions.

**OBJECTIVE 3:** To analyse the impact of ESG performance & Stock prices of the Nifty 50 companies.

**NULL HYPOTHESIS:** There is no significant impact of ESG performance & Stock prices of the Automobile sector.

**ALTERNATE HYPOTHESIS:** There is a significant impact of ESG performance & Stock prices of the Automobile sector.

Table 4.7 ANOVA of Automobile sector

Model	Sum of squares	Df	Mean square	F	Sig
Regression	15350090.518	1	15350090.518	2.695	.199
Residual	17087980.347	3	5695993.449		
Total	32438070.864	4			

The linear regression analysis examines the relationship between CP 1\_N (dependent variable) and ESG 1\_N (predictor). The model summary reveals a moderate positive correlation with an R value of 0.688. The R Square value of 0.473 suggests that ESG 1\_N explains 47.3% of the variance in CP 1\_N. However, the Adjusted R Square is lower at 0.298, indicating some adjustment for the small sample size. The standard error of the estimate is 2386.63, reflecting the average distance of the observed values from the regression line.

The ANOVA table provides further insights. The regression sum of squares (SSR) is 15,350,090.518, while the residual sum of squares (SSE) is 17,087,980.347, resulting in a total sum of squares (SST) of 32,438,070.864. The degrees of freedom for the regression and residual are 1 and 3, respectively. The mean squares for regression and residual are 15,350,090.518 and 5,695,993.449, respectively. The F-statistic is 2.695, and the associated p-value is 0.199. Since this p-value is greater than 0.05, the model is not statistically significant, indicating that ESG 1\_N does not significantly predict CP 1\_N. The overall findings suggest that, while there is a moderate correlation, the model lacks statistical significance and robustness, likely due to the small sample size.

**NULL HYPOTHESIS:** There is no significant impact of ESG performance & Stock prices of the Finance & Insurance sector.

**ALTERNATE HYPOTHESIS:** There is a significant impact of ESG performance & Stock prices of the Finance & Insurance sector.

Table 4.8 ANOVA of Finance & Insurance

Model	Sum of squares	Df	Mean square	F	Sig
Regression	132914.869	1	132914.869	.614	.491
Residual	649687.437	3	216562.479		
Total	782602.306	4			

The linear regression analysis explores the relationship between CP 2\_N (dependent variable) and ESG 2\_N (predictor). According to the model summary, the correlation coefficient (R) is 0.412, indicating a weak positive correlation. The R Square value of 0.170 suggests that ESG 2\_N explains 17.0% of the variance in CP 2\_N. However, the Adjusted R Square is -0.107, which implies that the model does not fit the data well when adjusting for the number of predictors. The standard error of the estimate is 465.36, representing the average distance that the observed values fall from the regression line.

The ANOVA table provides additional details. The regression sum of squares (SSR) is 132,914.869, and the residual sum of squares (SSE) is 649,687.437, leading to a total sum of squares (SST) of 782,602.306. The degrees of freedom for the regression and residual are 1 and 3, respectively. The mean square for the regression is 132,914.869, and for the residuals, it is 216,562.479. The F-statistic is 0.614, with an associated p-value of 0.491. Since this p-value is greater than the standard significance level of 0.05, the model is not statistically significant, indicating that ESG 2\_N does not significantly predict CP 2\_N.

In summary, while there is a weak positive correlation between ESG 2\_N and CP 2\_N, the model is not statistically significant ( $p = 0.491$ ) and does not provide a good fit for the data, as reflected by the negative Adjusted R Square. The small sample size ( $N = 5$ ) further limits the reliability and generalizability of these findings. Additional research with a larger sample size would be necessary to draw more robust conclusions.

**NULL HYPOTHESIS:** There is no significant impact of ESG performance & Stock prices of the FMCG sector.

**ALTERNATE HYPOTHESIS:** There is a significant impact of ESG performance & Stock prices of the FMCG sector.

Table 4.9 ANOVA of FMCG

Model	Sum of squares	Df	Mean square	F	Sig
Regression	1017657.506	1	1017657.506	.675	.471
Residual	4522075.753	3	1507358.584		
Total	5539733.259	4			

The linear regression analysis investigates the relationship between CP 4\_N (dependent variable) and ESG 4\_N (predictor). The model summary indicates a weak positive correlation with an R value of 0.429. The R Square value of 0.184 suggests that ESG 4\_N explains 18.4% of the variance in CP 4\_N. However, the Adjusted R Square is -0.088, indicating that the model does not fit the data well after adjusting for the number of predictors. The standard error of the estimate is 1227.75, representing the average distance that the observed values fall from the regression line.

The ANOVA table provides further insights. The regression sum of squares (SSR) is 1,017,657.506, and the residual sum of squares (SSE) is 4,522,075.753, resulting in a total sum of squares (SST) of 5,539,733.259. The degrees of freedom for the regression and residual are 1 and 3, respectively. The mean square for the regression is 1,017,657.506, and for the residuals, it is 1,507,358.584. The F-statistic is 0.675, with an associated p-value of 0.471. Since this p-value is greater than the standard significance level of 0.05, the model is not statistically significant, indicating that ESG 4\_N does not significantly predict CP 4\_N.

In summary, while there is a weak positive correlation between ESG 4\_N and CP 4\_N, the model is not statistically significant ( $p = 0.471$ ) and does not provide a good fit for the data, as reflected by the negative Adjusted R Square. The relatively high standard error of the estimate further suggests that the model's predictions are not very precise. The small sample size ( $N = 5$ ) limits the reliability and generalizability of these findings.

**NULL HYPOTHESIS:** There is no significant impact of ESG performance & Stock prices of the Healthcare & Pharmaceuticals sector.

**ALTERNATE HYPOTHESIS:** There is a significant impact of ESG performance & Stock prices of the Healthcare & Pharmaceuticals sector.

Table 4.10 ANOVA of Healthcare & Pharmaceuticals

Model	Sum of squares	Df	Mean square	F	Sig
Regression	790061.593	1	790061.593	.390	.577
Residual	6085159.479	3	2028386.493		
Total	6875221.072	4			

The linear regression analysis examines the relationship between CP 5\_N (dependent variable) and ESG 5\_N (predictor). The model summary reveals a weak positive correlation with an R value of 0.339. The R Square value of 0.115 indicates that ESG 5\_N explains only 11.5% of the variance in CP 5\_N. The Adjusted R Square is -0.180, suggesting that the model does not fit the data well when accounting for the number of predictors. The standard error of the estimate is 1424.21, reflecting the average distance that the observed values fall from the regression line.

The ANOVA table provides further details. The regression sum of squares (SSR) is 790,061.593, and the residual sum of squares (SSE) is 6,085,159.479, resulting in a total sum of squares (SST) of 6,875,221.072. The degrees of freedom for the regression and residual are 1 and 3, respectively. The mean square for the regression is 790,061.593, and for the residuals, it is 2,028,386.493. The F-statistic is 0.390, with an associated p-value of 0.577. Since this p-value is greater than the standard significance level of 0.05, the model is not statistically significant, indicating that ESG 5\_N does not significantly predict CP 5\_N.



In summary, there is a weak positive correlation between ESG 5\_N and CP 5\_N, but the model is not statistically significant ( $p = 0.577$ ) and does not provide a good fit for the data, as indicated by the negative Adjusted R Square. The relatively high standard error of the estimate further suggests that the model's predictions are not very precise. The small sample size ( $N = 5$ ) limits the reliability and generalizability of these findings.

**NULL HYPOTHESIS:** There is no significant impact of ESG performance & Stock prices of the Information & communication Technology sector.

**ALTERNATE HYPOTHESIS:** There is a significant impact of ESG performance & Stock prices of the Information & communication Technology sector.

Table 4.11 ANOVA of Information & communication Technology

Model	Sum of squares	Df	Mean square	F	Sig
Regression	58.070	1	58.070	.000	.994
Residual	2725113.224	3	908371.075		
Total	2725171.294	4			

The linear regression analysis examines the relationship between CP 6\_N (dependent variable) and ESG 6\_N (predictor). The model summary indicates an extremely weak positive correlation with an R value of 0.005. The R Square value is 0.000, meaning ESG 6\_N explains 0.0% of the variance in CP 6\_N. The Adjusted R Square is -0.333, indicating that the model does not fit the data well when adjusting for the number of predictors. The standard error of the estimate is 953.09, representing the average distance that the observed values fall from the regression line.

The ANOVA table provides further insights. The regression sum of squares (SSR) is 58.070, and the residual sum of squares (SSE) is 2,725,113.224, resulting in a total sum of squares (SST) of 2,725,171.294. The degrees of freedom for the regression and residual are 1 and 3, respectively. The mean square for the regression is 58.070, and for the residuals, it is 908,371.075. The F-statistic is 0.000, with an associated p-value of 0.994. Since this p-value is much greater than the standard significance level of 0.05, the model is not statistically significant, indicating that ESG 6\_N does not significantly predict CP 6\_N.

In summary, there is an extremely weak positive correlation between ESG 6\_N and CP 6\_N, but the model is not statistically significant ( $p = 0.994$ ) and does not fit the data well, as reflected by the zero R Square and negative Adjusted R Square. The high standard error of the estimate further suggests that the model's predictions are not precise. The small sample size ( $N = 5$ ) limits the reliability and generalizability of these findings.

## 5. FINDINGS

- All companies listed under Nifty 50 are considered strong ESG performers.
- Analysis reveals that the Finance & Insurance sector constitutes the largest portion (23%) of listed companies, followed by Information & Communication Technology (15%), with Energy, Power & Oil, Gas having the smallest representation (4%).
- Among listed companies, the automobile sector comprises six firms with an overall ESG score of 42.44 and an aggregated closing stock market price of 3,010.57 during the period 2015-2023.
- Finance & Insurance, with eleven firms, has an overall ESG score of 31.18 and an aggregated closing stock market price of 1,174.11 over the same period.
- Metal, Cement & Mining, comprising four firms, has an overall ESG score of 43.89 and an aggregated closing stock market price of 1,163.
- FMCG, with five firms, has an overall ESG score of 34.42 and an aggregated closing stock market price of 1,477.
- Healthcare & Pharmaceuticals, with five firms, has an overall ESG score of 36.64 and an aggregated closing stock market price of 2,085.91.
- Information & Communication Technology, with seven firms, has an overall ESG score of 61.24 and an aggregated closing stock market price of 1,376.
- Energy & Power, with two firms, has an overall ESG score of 30.44 and an aggregated closing stock market price of 154.22.
- Engineering & Infrastructure, with two firms, has an overall ESG score of 41.61 and an aggregated closing stock market price of 1,070.
- Oil & Gas, with three firms, has an overall ESG score of 32.81 and an aggregated closing stock market price of 707.96.
- Steel, with two firms, has an overall ESG score of 62.72 and an aggregated closing stock market price of 246.67.
- Other Miscellaneous sectors, comprising three firms, have an overall ESG score of 23.85 and an aggregated closing stock market price of 879.22.

- Steel industry, despite having the highest mean ESG score over the past 8-9 years, has the lowest closing stock prices. However, it remains attractive for individual investors due to its sustainable indicators.
- Information & Communication Technology records the highest ESG score (73.49), while FMCG has the lowest (34.42).
- Finance & Insurance sector shows a moderately positive correlation between ESG and closing prices, while Healthcare & Pharmaceuticals and Information & Communication Technology have a weakly positive relationship.
- Conversely, Automobile and FMCG sectors exhibit a negative correlation between ESG and closing prices.
- These findings suggest that other factors such as market conditions, financial performance, and brand loyalty play significant roles in influencing closing stock prices alongside ESG considerations.
- The study underscores ESG as a key indicator affecting stock prices

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## 6. CONCLUSION

The analysis of Nifty 50 companies reveals that the influence of ESG scores on stock prices varies significantly across different sectors. While sectors like Finance & Insurance show a positive correlation between ESG scores and stock prices, sectors such as Automobile and FMCG exhibit a negative correlation. High ESG scores in sectors like Steel and Information & Communication Technology indicate strong sustainability practices, yet these do not always correlate with higher stock prices, suggesting the significant role of other factors such as market conditions, financial performance, and brand loyalty. Investors should consider ESG scores as one of several important indicators, taking into account sector-specific dynamics and broader financial contexts. Despite the mixed impact on stock prices, ESG performance is increasingly important to investors prioritizing sustainability and ethical practices.

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