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Analysis of ESG companies based on ESG score and share price of sectorial companies listed in national stock exchange

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Abstract

Aim: The key motive of the study is understanding the performance of ESG sectors with respect to national stock exchange and to identify the relationship and the impact of these variables on the company's share price and performance.

Design/Methodology/Approach: In the current study, the data are taken from the secondary source of information. Top 5 sectors have been taken based on the weight given in the ESG100 indices in national stock exchange. And the ESG score of CRISIL is taken as a whole by calculating the average of companies under the selected sector. Similar companies of a sector are taken and average is taken. Further the share price of past five years is considered for the study. The information collected are further analyzed using the descriptive statistics, correlation, regression to determine and justify the objectives of the study.

Findings: The study has identified the unique factors for analyzing the exact picture of the companies under the ESG indices based on the sectorial indices. Which indicates the performances level through the descriptive analysis. And the relationship and impact of these factors such as scores has an impact on the companies share price and it shows the ESG companies' outcomes and the true picture.

Research Limitation: The study will help us in understanding the true picture based on the secondary source of information such as ESG score and the share price and return of select indices in National Stock Exchange. The particular variables used in this study are selected as a whole which doesn't represent a separate company. There will be a difference in the results when it is considered in perspective.

Originality: The study is original in its contribution, as the study uses secondary data from the official sources of national stock exchange and Crisil. This data is unbiased and can be used for further studies on varied views relating to ESG.

Keywords: ESG companies, ESG score cards, share price, sectorial indices, performance, relationship and impact

Introduction

In the modern world, a company's sustainability performance is becoming just as significant as its financial performance. ESG ratings, often known as sustainability scores, have effectively become widely used sustainability performance metrics for businesses worldwide. As a result, numerous studies have been conducted with the goal of comparing the financial performance of businesses from various perspectives in various geographical areas with their sustainability performance. The connection between the firms' risks and sustainability performance, CSR, and ESG has also been examined in other studies. However, no research has been identified that examines the connection between ESG/CSR and more drastic stock price fluctuations, or "stock price jumps," which constitute a significant portion of overall risk.

The Brundtland Report introduced the idea of sustainability in 1987, defining it as "meeting the needs of the present without in 2015." Social equality, environmental preservation, and moral corporate practices are the three main pillars of the SDGs. Global warming, the extinction of plant and animal species, inequality, and terrorism are just a few of the many issues that our planet continues to face in spite of all these national and international attempts. Sustainability has become even more crucial in light of all these global dangers. "Responsible investment," or ESG investment, might be a crucial first step in doing this.

Socially conscious investors utilize the three business factors known as "environmental, social, and governance," or ESG, to find and assess a sustainability and social impact of a business.

These days, if companies don't make enough progress on sustainability-related disclosures and the business practices that support them, investors are increasingly likely to opt out and vote against management. Institutional investors around the world are increasingly considering ESG performance when making decisions, and 74% of them are now more inclined to sell their holdings in businesses with a bad record in this area. A growth in total assets and inflows into sustainable funds demonstrate the growing emphasis on corporate ESG performance. Global sustainable fund assets reached USD 2.74 trillion by the end of December 2021, up 9% from the previous quarter. ESG benefits more than just investors. ESG is important for businesses' survival and expansion in addition to being beneficial to investors. Several studies have shown that a company's financial performance improves and sustainability increases when it adopts an ESG mindset (Ehsan *et al*, 2018; Behal & Uppal, 2022). Following these changes, a number of ESG rating firms have emerged that assess businesses according to particular ESG factors. After that, a total score is determined by allocating scores to each dimension. Several prominent international ESG rating firms are Bloomberg, Sustainalytics, and MSCI. Leading the way globally, a number of private sector ESG rating agencies that assess businesses based on ESG criteria have emerged in India, including Acuité Ratings & Research and Crisil Limited.

Review of Literature

Amar Rao, Vishal Dagar (2023) ^[3]: The paper look at how ESG (environment, social, and governance) practices affect the financial performance of India's Nifty 50 firms between 2015 and 2022. We find that the correlation between financial performance and ESG practices changes across the return on equity (ROE) distribution using fixed-effects panel quantile regression. The social pillar score shows a largely inconsequential association with ROE, whereas the environmental and governance pillar scores consistently have a negative impact across nearly all quantiles with strong statistical significance. In the bottom end of the ROE distribution, it has a negative effect that is only marginally statistically significant. Investors, business leaders, and legislators should take note of the results and their ramifications.

Dr. Shikha Gupta, Rajni Tuteja (2022) ^[1]: The pursuit of sustainable development has prompted corporations and investors to incorporate environmental, social, and governance (ESG) principles into their business and investment choices. In this case, ESG scores seem to represent a measure of a company's long-term performance. The goal of the current study is to analyze the ESG policies of 100 leading Indian corporations across ten industries (by market size). Both the total ESG scores of CRISIL and the scores for each of its dimensions have been used for analysis. There are statistically significant disparities between sectors on all three of the ESG dimensions—environment, social, and governance—according to the results of oneway ANOVA and Welch ANOVA. Due to their minimal carbon footprints, water consumption, waste creation, and job-related injuries, the information technology and financial sectors emerged as the leaders in ESG performance. Because of their inherent production

processes, which release harmful gasses and have a high tendency to use energy and power, companies in the cement, metals & mining, and chemical industries were deemed to be underachievers. By implementing a number of social welfare initiatives and making extensive disclosures, these sectors attempt to make up for their poor environmental performance. Additionally, it was discovered that businesses' environmental performance trailed behind their social and governance performance, regardless of the sector.

Namarta Kaushik, Nirmala Chaudhary (2022) ^[2]: Examining how environmental, social, and governance performance (ESGP) affects financial performance (FNP) overall and by component in Indian sectors is the aim of this study. From 2012 to 2018, 66 companies from five different industries were shortlisted using the NSE's Nifty 500 index as a framework. The company value, which in turn dictates the corporate financial performance, was represented by ROA, ROE, and TobinsQ. Using the Multiple Regression approach, the study discovered that the ESG score and its constituent parts did have an impact on the company's financial success. Furthermore, compared to environmental and social performance, governance performance has the biggest influence on FNP when examining the various ESGP components.

Priyanka Devi, Sapna (2024) ^[5]: The goal of this study is to determine whether a company's profitability, specifically return on assets (ROA), and its ESG (Environmental, Social, and Governance) ratings are significantly correlated. It seeks to ascertain whether this link is neutral, negative, or favorable. As part of the research methodology, companies that were listed on the BSE500 stock index were examined, and their 2020 and 2021 ESG ratings were analyzed. The final dataset, which came from the Ace equity database, had 148 companies and 296 observations over the course of two years. The relationship between ESG ratings (the independent variable) and ROA (the dependent variable) was evaluated using panel regression analysis, which also took business size and financial leverage into account as control variables. At a 5% significance level, the findings showed a statistically significant inverse relationship between company performance as measured by ROA and ESG ratings. There are a number of reasons why ESG scores and company performance (ROA) are negatively correlated. Businesses that favor ESG measures frequently have to pay more for things like employee welfare and environmental compliance, which can momentarily lower profitability. Furthermore, ESG-aware businesses might undertake long-term investments that take time to pay off, which would affect their short-term return on assets (ROA). Strict ESG guidelines may also turn off certain clients or investors, which would reduce sales. But in the long run, strong ESG practices can improve resilience and sustainability, which may result in better performance and reduced risk.

Ayush Sharma, Dr. Sowmya Kethi Reddi (2024) ^[6]: From 2015 to 2023, this study looks at the Environmental, Social, and Governance (ESG) performance of Nifty 50 firms by industry and assesses how it affects stock prices. Even though ESG considerations are becoming more and more important when making investing decisions, little is known about how these non-financial indicators affect stock market performance in India. By emphasizing their function in risk management, investor demand for sustainable investments,

and potential for long-term financial performance, the study tackles the necessity of incorporating ESG factors into the stock market. The study provides a thorough examination of ESG trends and their financial ramifications by utilizing regression, correlation, percentage analysis, and secondary data. The results indicate that whereas industries such as finance and insurance have a favorable relationship between ESG rankings and The results demonstrate that whereas ESG scores and stock prices are positively correlated in industries like finance and insurance, they are negatively correlated in industries like automobiles and fast-moving consumer goods. Strong sustainable practices are reflected in high ESG ratings in industries like steel and information and communication technology, but these scores do not always translate into better stock values, highlighting the importance of market dynamics, financial success, and brand loyalty. According to the study's findings, ESG scores should be taken into account in addition to sector-specific dynamics and larger financial settings, providing investors, legislators, and corporate stakeholders with insightful information. ESG performance is becoming more and more significant to investors that place a high value on sustainability and moral behavior, despite the conflicting effects on stock prices.

Abhishek Parikh, Divya Kumari (2024) [4]: This study aims to identify potential selection criteria for upcoming investments and ascertain the association between ESG scores and shareholders' value. Notably, there are investment outlets and funds created especially for ESG concerns, which promote the building of sustainable wealth. Nonetheless, investors continue to prioritize wealth generation and returns. The majority of rating agencies have made it common practice to report on companies' financial health using ESG scores in recent years. In order to examine the effect of ESG scores on the stock returns of 225 Indian companies, this study uses a linear regression model. The findings indicate the negative effect of the environmental (E) component on equity returns, while providing empirical support for the favorable effect of the governance (G) element. Furthermore, the social (S) factor's influence is determined to be negligible. Consequently, we draw the conclusion that organizations may require financial incentives to initiate E- and S-factor activities. To increase the wealth of their shareholders, businesses must be extremely aware of their governance procedures.

Methodology: The study is based on analysis the analytical outcome of the ESG sector leaders along with the selected sectors of based on the ESG score from the CRISIL score

for the sectors under the National Stock exchange in India. The information used for the study are secondary source of information and are collected from the official website of CRISIL and National stock exchange. And other necessary details are taken from the journal's magazines, news articles and official reports of regulatory authority. The study covers a period of 8 years from the 2017-2024. Where the daily data are taken and converted to monthly and the analysis has been carried out from the monthly data. There are totally 10 sectors with high score in CRISIL ESG score rating the sectors taken for the analysis are Automobile, Oil & Gas, Energy, Infrastructure, Metal, IT, FMCG, Financial Services, Consumer Durables and service sector and ESG sector leader has taken has a whole.

Variables and Measures

The study has taken totally 10 sectors with high score in CRISIL ESG score rating the sectors taken for the analysis are Automobile, Oil & Gas, Energy, Infrastructure, Metal, IT, FMCG, Financial Services, Consumer Durables and service sector as dependent variable and ESG sector leader has independent variable. The share price of the sectors and the indices are taken on daily bases and they are further converted to Monthly bases and the analysis were carried out. The analysis is made on investigating the cause and effect, relationship and Impact of the variables selected for the study.

Data Interpretation

IBM SPSS and IBM EViews has been used on the accumulated data, the tools such as Descriptive statistics, Pair wise granger, Correlation and Regression are used to identify their performance, cause and effect, relationship and their impact with respect to dependent and independent variable.

Objectives of the study

- To study the performance of the ESG sector leader and select sectors based on ESG score listed in National Stock Exchange.
- To elaborate the causal and effect between ESG Score and ESG sector leader listed in National Stock Exchange.
- To elucidate the relationship between ESG Score and ESG sector leader listed in National Stock Exchange.
- To examine the impact of ESG Sector Leaders on select sectors based on ESG score listed in National Stock Exchange.

Analysis and Interpretation

Table 1: Descriptive statistics for select sectors based on ESG Score and ESG Sector Leaders listed in National Stock Exchange

YEAR	Auto	OIL & GAS	Energy	Infra	Metal	IT	FMCG	Financial Services	Consumer Durables	Services Sector	ESG SL
2017	2628063	1112036	3086294	806257.7	815601.6	2629051	6128154	2334460	2715550	3089120	386883.3
2018	2606946	1173037	3486706	799396.8	877693.4	3430270	7069691	2683627	3300110	3554393	440538.2
2019	1963478	1209366	3794884	773134.9	670673.8	3813345	7358038	3133205	3746565	3943359	468085.2
2020	1851215	1209784	3682135	776880.9	582292.1	4354873	7571450	2984573	3804326	3838939	484190.4
2021	2599008	1691585	5021732	1114439	1225632	7521131	9026615	4205296	5970011	5575050	677378.8
2022	2957923	1956622	6437649	1240975	1452738	7641845	10003777	4329837	6535254	5879775	714191.9
2023	3642941	1924069	6324704	1421460	1570121	7473817	12264686	5198582	6597388	6050877	752676
2024	91984.9	48413.35	169444.9	36637.7	39656.95	174635.6	287086.4	215385.1	156339.4	137862	17647.35
Mean	2292694.93	1290613.91	4000443.58	871147.81	904301.20	4629870.78	7463687.09	3135620.58	4103192.96	4008671.80	492698.89
Standard deviation	1049976.72	610330.36	2010860.18	417999.57	501684.33	2713805.56	3493046.98	1522353.53	2203425.55	1934401.26	236348.33
Variance	110245.11	372503.15	404355.87	174723.64	251687.16	736474.06	122013.77	231756.02	485508.41	374190.82	558605.37

Source: Computed using EViews

The table above indicates the descriptive statistics of the select sectors based on ESG score and ESG Sector Leaders. The mean of FMCG sector is found to be high with 7463687.09 followed by IT sector and Consumer Durables. And the standard deviation it is found high in FMCG sectors

followed by IT sector and Consumer Durables. Variance is found high in IT sector followed by Consumer Durables and ESG sector Leaders listed in National Stock Exchange. This means that the variance in any variable is take as how much a variable varies from the exact value of mean.

Table 2: Pair Wise Granger Causality for select sectors based on ESG Score and ESG Sector Leaders listed in National Stock Exchange

Pairwise Granger Causality Tests			
Null Hypothesis	Obs	F-Statistic	Prob.
CONSUMER_DURABLES does not Granger Cause ESG_SECTOR_LEADERS	6	3.48289	0.3543
ESG_SECTOR_LEADERS does not Granger Cause CONSUMER_DURABLES		2.73959	0.3929
ENERGY does not Granger Cause ESG_SECTOR_LEADERS	6	44.8345	0.1050
ESG_SECTOR_LEADERS does not Granger Cause ENERGY		10.8789	0.2096
FINANCIAL_SERVICES does not Granger Cause ESG_SECTOR_LEADERS	6	2.84399	0.3867
ESG_SECTOR_LEADERS does not Granger Cause FINANCIAL_SERVICES		3.35063	0.3603
FMCG does not Granger Cause ESG_SECTOR_LEADERS	6	9.68193	0.2216
ESG_SECTOR_LEADERS does not Granger Cause FMCG		42.2222	0.1082
INFRA does not Granger Cause ESG_SECTOR_LEADERS	6	1.75766	0.4706
ESG_SECTOR_LEADERS does not Granger Cause INFRA		1.25512	0.5337
IT does not Granger Cause ESG_SECTOR_LEADERS	6	2388.14	0.0145
ESG_SECTOR_LEADERS does not Granger Cause IT		6843.29	0.0085
METAL does not Granger Cause ESG_SECTOR_LEADERS	6	0.92532	0.5923
ESG_SECTOR_LEADERS does not Granger Cause METAL		0.94192	0.5889
OIL_GAS does not Granger Cause ESG_SECTOR_LEADERS	6	9.97695	0.2185
ESG_SECTOR_LEADERS does not Granger Cause OIL_GAS		4.02166	0.3325
SERVICES_SECTOR does not Granger Cause ESG_SECTOR_LEADERS	6	0.78315	0.6242
ESG_SECTOR_LEADERS does not Granger Cause SERVICES_SECTOR		0.73616	0.6360
AUTO does not Granger Cause ESG_SECTOR_LEADERS	6	0.53872	0.6938
ESG_SECTOR_LEADERS does not Granger Cause AUTO		0.05484	0.9493
ENERGY does not Granger Cause CONSUMER_DURABLES	6	31.0398	0.1259
CONSUMER_DURABLES does not Granger Cause ENERGY		13.7711	0.1872
FINANCIAL_SERVICES does not Granger Cause CONSUMER_DURABLES	6	39.8571	0.1113
CONSUMER_DURABLES does not Granger Cause FINANCIAL_SERVICES		28.5412	0.1312
FMCG does not Granger Cause CONSUMER_DURABLES	6	3.56747	0.3506
CONSUMER_DURABLES does not Granger Cause FMCG		32.2781	0.1235
INFRA does not Granger Cause CONSUMER_DURABLES	6	1.51285	0.4984
CONSUMER_DURABLES does not Granger Cause INFRA		1.44748	0.5067
IT does not Granger Cause CONSUMER_DURABLES	6	8.18614	0.2399
CONSUMER_DURABLES does not Granger Cause IT		4.86114	0.3054
METAL does not Granger Cause CONSUMER_DURABLES	6	0.34077	0.7712
CONSUMER_DURABLES does not Granger Cause METAL		0.17653	0.8597
OIL_GAS does not Granger Cause CONSUMER_DURABLES	6	39.2161	0.1122
CONSUMER_DURABLES does not Granger Cause OIL_GAS		55.3003	0.0947
SERVICES_SECTOR does not Granger Cause CONSUMER_DURABLES	6	540.786	0.0304
CONSUMER_DURABLES does not Granger Cause SERVICES_SECTOR		690.312	0.0269
AUTO does not Granger Cause CONSUMER_DURABLES	6	0.65206	0.6588
CONSUMER_DURABLES does not Granger Cause AUTO		0.14112	0.8831
FINANCIAL_SERVICES does not Granger Cause ENERGY	6	13.2785	0.1905
ENERGY does not Granger Cause FINANCIAL_SERVICES		78.9766	0.0793
FMCG does not Granger Cause ENERGY	6	0.65452	0.6581
ENERGY does not Granger Cause FMCG		4.89428	0.3045
INFRA does not Granger Cause ENERGY	6	0.97428	0.5824
ENERGY does not Granger Cause INFRA		3.06220	0.3747
IT does not Granger Cause ENERGY	6	32.5722	0.1230
ENERGY does not Granger Cause IT		247.402	0.0449
METAL does not Granger Cause ENERGY	6	1.36019	0.5184
ENERGY does not Granger Cause METAL		1.69133	0.4777
OIL_GAS does not Granger Cause ENERGY	6	0.12623	0.8935
ENERGY does not Granger Cause OIL_GAS		0.29239	0.7944
SERVICES_SECTOR does not Granger Cause ENERGY	6	6.00427	0.2773
ENERGY does not Granger Cause SERVICES_SECTOR		17.4583	0.1669
AUTO does not Granger Cause ENERGY	6	1.41047	0.5116
ENERGY does not Granger Cause AUTO		1.70546	0.4761
FMCG does not Granger Cause FINANCIAL_SERVICES	6	104.748	0.0569
FINANCIAL_SERVICES does not Granger Cause FMCG		202.638	0.0496
INFRA does not Granger Cause FINANCIAL_SERVICES	6	1.28408	0.5294
FINANCIAL_SERVICES does not Granger Cause INFRA		1.09386	0.5601

IT does not Granger Cause FINANCIAL_SERVICES	6	8.65510	0.2337
FINANCIAL_SERVICES does not Granger Cause IT		5.13848	0.2978
METAL does not Granger Cause FINANCIAL_SERVICES	6	1.46633	0.5043
FINANCIAL_SERVICES does not Granger Cause METAL		1.78296	0.4680
OIL_GAS does not Granger Cause FINANCIAL_SERVICES	6	120.470	0.0643
FINANCIAL_SERVICES does not Granger Cause OIL_GAS		183.038	0.0522
SERVICES_SECTOR does not Granger Cause FINANCIAL_SERVICES	6	36.1521	0.1168
FINANCIAL_SERVICES does not Granger Cause SERVICES_SECTOR		35.8436	0.1173
AUTO does not Granger Cause FINANCIAL_SERVICES	6	0.45870	0.7222
FINANCIAL_SERVICES does not Granger Cause AUTO		0.12226	0.8964
INFRA does not Granger Cause FMCG	6	16.5788	0.1711
FMCG does not Granger Cause INFRA		7.41965	0.2513
IT does not Granger Cause FMCG	6	156.667	0.0564
FMCG does not Granger Cause IT		6.29417	0.2713
METAL does not Granger Cause FMCG	6	64.9359	0.0874
FMCG does not Granger Cause METAL		6.70499	0.2634
OIL_GAS does not Granger Cause FMCG	6	12.4705	0.1963
FMCG does not Granger Cause OIL_GAS		2.38821	0.4161
SERVICES_SECTOR does not Granger Cause FMCG	6	15.0959	0.1791
FMCG does not Granger Cause SERVICES_SECTOR		3.72115	0.3442
AUTO does not Granger Cause FMCG	6	1.41146	0.5114
FMCG does not Granger Cause AUTO		1.68922	0.4779
IT does not Granger Cause INFRA	6	20.4177	0.1546
INFRA does not Granger Cause IT		9.87043	0.2196
METAL does not Granger Cause INFRA	6	0.34396	0.7697
INFRA does not Granger Cause METAL		0.30392	0.7886
OIL_GAS does not Granger Cause INFRA	6	5.72331	0.2834
INFRA does not Granger Cause OIL_GAS		2.89880	0.3836
SERVICES_SECTOR does not Granger Cause INFRA	6	0.58987	0.6773
INFRA does not Granger Cause SERVICES_SECTOR		0.84286	0.6102
AUTO does not Granger Cause INFRA	6	0.24806	0.8176
INFRA does not Granger Cause AUTO		0.03156	0.9699
METAL does not Granger Cause IT	6	2.16311	0.4333
IT does not Granger Cause METAL		1.30125	0.5269
OIL_GAS does not Granger Cause IT	6	7.33327	0.2526
IT does not Granger Cause OIL_GAS		3.87052	0.3382
SERVICES_SECTOR does not Granger Cause IT	6	2.22455	0.4284
IT does not Granger Cause SERVICES_SECTOR		3.76271	0.3425
AUTO does not Granger Cause IT	6	1.16172	0.5485
IT does not Granger Cause AUTO		0.12716	0.8929
OIL_GAS does not Granger Cause METAL	6	0.79957	0.6203
METAL does not Granger Cause OIL_GAS		0.57900	0.6807
SERVICES_SECTOR does not Granger Cause METAL	6	0.30354	0.7888
METAL does not Granger Cause SERVICES_SECTOR		0.47795	0.7150
AUTO does not Granger Cause METAL	6	0.90019	0.5976
METAL does not Granger Cause AUTO		0.59661	0.6752
SERVICES_SECTOR does not Granger Cause OIL_GAS	6	623.547	0.0283
OIL_GAS does not Granger Cause SERVICES_SECTOR		392.606	0.0357
AUTO does not Granger Cause OIL_GAS	6	0.56067	0.6866
OIL_GAS does not Granger Cause AUTO		0.62112	0.6678
AUTO does not Granger Cause SERVICES_SECTOR	6	0.57725	0.6813
SERVICES_SECTOR does not Granger Cause AUTO		0.07659	0.9312

Source: Computed using EViews

The results of pair wise granger exhibit the cause and effect of the ESG sector leaders on the select sectors based on the ESG score listed in National Stock Exchange. IT sector granger cause ESG sector leader and vice versa. Service sectors granger cause Consumer Durables and vice versa. IT sectors doesn't granger cause Energy sectors, but Energy sector granger cause IT sector. FMCG sectors granger cause Financial Services sectors and vice versa. Oil and Gas sector doesn't granger cause Financial Services, versa financial

services granger cause oil and Gas sector. IT sector granger cause FMCG sector, whereas FMCG doesn't cause IT sector. Service sector granger cause Oil and Gas sector and vice versa. Apart from IT sector none of the other sector's granger cause the ESG sector leaders. Hence the null hypothesis is accepted concluding there is no cause and effect of ESG sector leader on select sectors based on ESG score listed in National Stock Exchange.

Table 3: Relationship Analysis between select sectors based on ESG Score and ESG Sector Leaders listed in National Stock Exchange

Correlations											
	EGS SL	Auto	Oil & Gas	Energy	Infra	Metal	IT	FMCG	Financial services	Consumer Durables	Service
ESG SL	1										
Auto	.898**	1									
Oil & Gas	.994**	.919**	1								
Energy	.987**	.896**	.993**	1							
Infra	.984**	.954**	.988**	.981**	1						
Metal	.944**	.935**	.958**	.959**	.974**	1					
IT	.970**	.796*	.956**	.960**	.935**	.925**	1				
FMCG	.982**	.929**	.976**	.973**	.985**	.931**	.919**	1			
Financial services	.991**	.893**	.979**	.980**	.982**	.941**	.960**	.989**	1		
Consumer Durables	.989**	.851**	.982**	.987**	.966**	.947**	.992**	.957**	.983**	1	
Service	.999**	.889**	.994**	.987**	.979**	.942**	.972**	.976**	.989**	.991**	1

Source: Computed using EViews

The results of correlation analysis depicts the relationship between select sectors based on ESG Score and ESG Sector Leaders listed in National Stock Exchange. All the select sectors based on ESG score such as Automobile, Oil and Gas, Energy, Infrastructure, Metal, IT, FMCG, Financial Services, Consumer Durables and service sectors have a

high positive relationship between ESG Sector Leaders listed in National Stock Exchange. Hence the null hypothesis is rejected concluding that there is significant relationship between ESG Sector Leaders and select sectors based on ESG score.

Table 4: Regression Analysis between ESG Sector Leaders and select sectors based on ESG score listed in National Stock Exchange

Model	R	R Square	Adjusted R Square	Durbin-Watson
Auto	.898 ^a	.807	.775	.915
Oil and Gas	.994 ^a	.989	.987	1.896
Energy	.987 ^a	.974	.970	2.156
Infrastructure	.984 ^a	.967	.962	1.108
Metal	.944 ^a	.892	.874	.943
IT	.970 ^a	.940	.930	.789
FMCG	.982 ^a	.963	.957	2.135
Financial Services	.991 ^a	.982	.979	2.090
Consumer Durables	.989 ^a	.979	.975	.632
Service Sector	.999 ^a	.998	.998	2.985

Source: Computed using EViews

The model summary results explain the strong positive relationship between ESG sector leader and select sectors based on ESG score. Automobile, Oil and Gas, Energy, Infrastructure, Metal, IT, FMCG, Financial Services, Consumer Durables and Service sector listed in National Stock has strong positive relationship with ESG Sector leader and R square shows the exact slight variation between the dependent and independent variable. Adjusted

R square value ranges from .7 to .9 which strengthens the model fit of the study. Durbin Watson value of Energy, FMCG, Financial service and service sector ranges from 2 indicating negative auto correlation. And other sectors such as Automobiles, oil and gas, Infrastructure, Metal, IT and Consumer Durables have a Durbin Watson value below 2 indicating positive auto correlation in the study.

Table 5: ANOVA for ESG Sector Leaders and select sectors based on ESG score listed in National Stock Exchange

Model	Mean Square	F	Sig.
Auto	622667.56	25.066	.002 ^b
Oil and Gas	257828.70	529.151	.000 ^b
Energy	275790.16	227.959	.000 ^b
Infrastructure	118313.72	177.789	.000 ^b
Metal	157163.72	49.586	.000 ^b
IT	484732.97	94.432	.000 ^b
FMCG	822814.47	157.819	.000 ^b
Financial Services	159241.44	319.786	.000 ^b
Consumer Durables	332706.61	279.222	.000 ^b
Service Sector	261471.84	3397.680	.000 ^b

Source: Computed using EViews

The table above explains the ANOVA for ESG sector leader and select sectors based on ESG score listed in National Stock Exchange. The F statistics is positive and signifying the variance in the model and components. And the

significant value is found to be less than 0.05 which means there prevails a significant relationship among the dependent and the independent variable in the study.

Table 6: Coefficient for ESG sector leader and select sectors based on ESG score listed in National Stock Exchange

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
Auto	ESG Sector Leaders	3.990	.797	.898	5.007	.002
Oil and Gas		2.568	.112	.994	23.003	.000
Energy		8.398	.556	.987	15.098	.000
Infrastructure		1.739	.130	.984	13.334	.000
Metal		2.005	.285	.944	7.042	.000
IT		11.134	1.146	.970	9.718	.000
FMCG		14.506	1.155	.982	12.563	.000
Financial Services		6.382	.357	.991	17.883	.000
Consumer Durables		9.224	.552	.989	16.710	.000
Service Sector		8.177	.140	.999	58.290	.000

Source: Computed using EViews

The Coefficient table exhibits the ESG sector leader and select sectors based on ESG score listed in National Stock Exchange. The significant value is found to be below 0.05 for all the select sectors base on ESG score when ESG sector is independent variable concluding that there is an impact of ESG sector leader on select sector based on ESG score. Hence the significant value for all the select sectors is found to be below 0.05, which is evident that there is an impact of ESG sectors leaders on the select sectors based on ESG score. Hence the null hypothesis is rejected concluding that there is significant impact of ESG sectors leaders on the select sectors based on ESG score.

Findings of the study

- The leadership in the ESG sector Granger-causes the IT sector, and the IT sector Granger-causes the ESG sector leaders. Consumer durables are also a Granger-cause of the service sectors.
- The IT sector is not Granger-causally related to the energy sector, but the energy sector Granger-causes the IT sector.
- Financial Services and FMCG sectors are complementary to one another. Financial Services Granger-causes the Oil and Gas industry, as opposed to the other kind. Although the opposite is not true, the FMCG and IT sectors are Granger-caused.
- The Oil and Gas sectors are Granger-caused by the Service sector, and vice versa. All of the other sectors Granger-cause ESG sector leaders, with the exception of the IT sector.
- There is no cause-and-effect relationship between select sectors and leaders in the ESG sector as determined by the ESG scores listed on the National Stock Exchange.
- However, based on their ESG scores, leaders in the ESG sector have a substantial correlation with specific sectors.
- There is a substantial correlation between the independent and dependent variables, according to the study. Based on ESG scores, ESG sector leaders have a significant influence on particular sectors.

Conclusion

According to the study's findings, there is a strong association between the sectors with the highest ESG ratings and the ESG sector leader indexes. The sectors that were chosen based on their ESG scores have been strengthened by the use of recent CRISIL data (CRISIL Score 2023) as a result of insufficient historical data supporting ESG scores

for previous relevant years. The development of ESG investing is a major step in the right direction towards bringing accountability and balance to the business world via the financial markets and finance sectors. Conscientious and responsible investors are becoming more passionate about environmental and social issues, which is having a good impact on others.

This programme is an excellent means of giving back to the community and it helps to save the environment, opening the door for, this project is a great opportunity to give back to the community and helps conserve the environment, which will help create a sustainable future. All investors, no matter how big or small, must take an active part in the market and adopt the responsibilities of a responsible global citizen.

Institutions have experienced a paradigm change as a result of embracing the vast potential of ESG investment and developing a methodical process to convert unprocessed data into definitive ratings and scores. Unquestionably, this breakthrough has given people the ability to make thoughtful, well-informed decisions with the least amount of negative environmental impact. Even with the admitted flaws in the ratings and process, it is on par with and, in some cases, even better than the conventional method. The business sector is unquestionably the backbone of economic activity, and reaching balance by making wise decisions and employing sensible tactics would promote economic expansion and efficient resource management through sustainable finance.

ESG has the ability to benefit businesses, investors, and society as a whole. It embodies the triple bottom line and may even establish itself as the "new normal" in the financial industry. Leaders in the ESG field exert influence over sectors that achieve high ESG scores. Investing in ESG not only offers higher returns, but it also helps investors fulfil their corporate social obligation to the ESG framework's operating sectors as well as to themselves.

References

1. Gupta S, Tuteja R. Examining the sectoral differences in ESG practices of select companies in India: A comparative testing based on scores; c2022.
2. Kaushik N, Chaudhary N. Financial value of ESG performance: A study of Indian listed companies. J Asiatic Soc Mumbai. 2022, 95(3). ISSN-0972-0766.
3. Rao A, Dagar V. Good for the planet, good for the wallet: the ESG impact on financial performance in India. Financ Res Lett. 2023, 56.

4. Parikh A, Kumari D. The impact of environmental, social and governance score on shareholder wealth: A new dimension in investment philosophy. *Clean Respons Consum.* 2024, 8.
5. Devi P, Sapna. Relationship of ESG score with firm performance: A study of Indian listed companies. *IMIB J Innov Manag.* 2024, 2(2).
6. Sharma A, Reddy SK. A study on the effect of environmental social factors on stock market. *Int J Res Publ. Rev.* 2024;5(6):2038-2047.