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E - JOURNAL OF FRTL @ IIM CALCUTTA
December 2024, Volume 12, Issue 3

INDIAN INSTITUTE OF MANAGEMENT
CALCUTTA

INDIAN INSTITUTE OF MANAGEMENT CALCUTTA

Financial Research & Trading Laboratory

Corporates Performance on Troika of ESG

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I. Introduction

E, S and G are an integral elements of business world, especially a key concern for the corporate sector across the globe. Corporate houses are required to evince the approaches espoused for implementation of elements of ESG. Referring to the article, titled, *"ESG Performance drives Corporate Performance"* (Maria Montenegro) the reasons that engender to explore ESG performance are-

- 87% of the investors are of the opinion that corporate reports on sustainability matters contains greenwashing, and 82% states that their clients ask for ESG factors to be taken into consideration.
- 64% of consumers select, switch, avert, or gave up consumption of such brands which does not focus on societal issues, and drastic change in buying behaviour.
- It is estimated that by 2029, 72% of the global human capital will be comprised of Millennials who will lay more emphasis on ESG matters in comparison to their predecessors.
- The agility among the regulators on ESG matters across the globe have increased prodigiously.

The soaring significance of a corporate's ESG performance, driven by investors, consumers, human capital, and regulators has engendered putting ESG agenda on the top by top management of the companies. Numerous ESG regulations are governing the companies to ensure that various elements covered under ESG are complied with. The developed markets such as European Union (EU), U.K and U.S.A have espoused noteworthy initiates towards ESG.

The European Union (EU) has laid stress upon E, S and G with a double materiality approach, that is companies will be required to take into consideration not only the impact of external factors (e.g., climate change) on their financial value, but also the impact their operations have on the planet and society. Previously EU made it mandatory for 11,700 Public Interest Entities that is listed companies, banks and insurers to make ESG disclosures through the Non-Financial Reporting Directive (NFRD). Then the onset of Corporate Social Responsibility Directive (CSRD) on January 5, 2023 provided impetus to ESG, as it laid emphasis on modernization and strengthening of the rules pertaining to the social and environmental information that corporate houses have to report.

This directive made mandatory for large companies and listed SMEs of EU to report on sustainability. Moreover, this directive made compulsory for some non-EU companies to report on sustainability if they earn more than EUR 150 million in the EU market. The eye-catchy facet of the mentioned directive is that new rules provide investors and other stakeholders to access such information that they may need to refer for determining the impact of companies on people and the ecosystem and for ascertaining financial risks and opportunities resulting from climate change and other sustainability issues.

Both at global and national levels, ESG has engulfed the empyrean of corporate world which may be observed from the initiatives taken by or stress on ESG laid by various organizations such as GRI, European Union's European Sustainability Reporting Standards, UNFCCC, International Sustainability Standards Board (ISSB) SEBI through BRSR and BRSR Core etc.

ESG is an ocean, and it is next to impossible to cover all its vital facets in one article, so this article has mainly focused on the ESG performance of the companies based on their ESG ratings assigned by CRISIL across diverse sectors of Indian economy to comprehend that magnitude of momentum in ESG. In future, endeavours will be made to reconnoiter other key concepts or aspects of ESG like linking of companies performance with BRSR Core, ESG investing, CSR, financial performance of family owned and professionally managed companies etc.

The elements of ESG broadly include, energy consumption and efficiency, carbon footprint, including greenhouse gas emissions, waste management, fair pay for employees, including a living wage, diversity, equity and inclusion programs, workplace health and safety, customer satisfaction levels, company leadership and management, executive compensation policies etc.

II. Analysis and Discussion

In this section, the analysis of ESG ratings of 959 companies across 65 sectors have been undertaken and based on the inferences pertaining to the 'E', 'S' and 'G' dimensions have been derived. The ESG ratings of the companies have been referred from CRISIL ESG ratings assigned to the companies ESG performance of various companies have been analyzed by applying Descriptive Statistics and F-Test (One Factor Model). The various scenarios that have been considered while applying the mentioned statistical tests are as under:

Descriptive Statistics: This statistical tool has been applied to analyze the performance of companies based on the ratings secured by them on E, S and G parameters. Through this tool, the ESG performance of the companies have been ascertained for the following variables: Mean, Standard Error, Mode, Median, Standard Deviation, Coefficient of Variation, Kurtosis, Skewness and Range.

The analysis of E, S and G performance of the companies is provided in table 1, 2 and 3 respectively. The performance analysis on Environmental (E) yardstick is as under:

Table 1

Analysis of Corporate Performance on "E" Dimension

Variables	Values	Inferences
Mean	40.91657977	Mean value of 40.916 or 40.92 is quite impressive and evince that majority of corporate houses are performing well on environmental yardstick.
Standard Error	0.329423103	Since standard error is a statistic that reveals how accurately the sample data reveals the whole population and variation between the calculated mean of the population and the actual mean of the population. In this regard, the standard error of 0.33 is a harbinger of robust performance on environmental dimension by the companies. Moreover, study of large number of companies have provided highly accurate results pertaining to corporate houses performance on environmental parameter.
Median	40	As median is a positional average and denotes the middle value in the data series. The median value of 40 which is reasonably high indicates that huge number of environmental ratings lies both below and above the given median value.
Mode	41	The mode value of 41 exhibits that the environmental score of 41 has been secured by most of the companies across various sectors which shows that substantial number of companies are espousing initiatives towards protecting mother nature.
Standard Deviation	10.20148411	Standard deviation value though ostensibly seems to be higher but in view of the large number of companies that is 959 covered in the study, this value may be considered to be quite lower.
Coefficient of Variation	24.93%	The coefficient of variation appears to be quite less in view of the large sample size of the companies considered for the research study. Moreover, large number of corporate houses are taking requisite initiates to reduce the level of GHG (Green House Gases) that is GHG Emission 1, 2 and 3. Thus, in near future, as more companies contribute towards protection of ecosystem, the magnitude of variation in environmental ratings will be reduced.
Kurtosis	0.646852375	The positive kurtosis value indicates that the distribution is positively peaked. It may be deduced

		that high ratings have been secured by majority of the companies considered for the research study, thereby resulting into positive kurtosis which is a good omen from the perspective of environment preservation
Skewness	0.362350626	The positive skewness value reveals that the data is positively skewed and since majority of corporate houses have scored quite high ratings in environmental yardstick, so it may be concluded that due to quite high environmental ratings, the skewness value is positive. A skewness value between -1 and +1 is considered to be excellent, thus in this case the skewness value being 0.36 exhibits robust performance of companies on environmental dimension.
Range	66	The range value is quite higher, indicating that the gap between the largest and smallest environmental ratings of the companies is high. As it may be observed that the maximum / largest environmental score is 78 and the minimum / smallest environmental score is 12, thereby the difference of the two is 66 (78-12).
Minimum	12	[redacted]
Maximum	78	

Table 2

Analysis of Corporate Performance on "S" Dimension

Variables	Values	Inferences
Mean	53.30135558	The mean or average score of 53.30 is quite encouraging and an indication of companies taking care of the elements covered under social dimensions like fair pay for employees, including a living wage; Diversity, equity and inclusion programs; Employee experience and engagement etc.
Standard Error	0.300769881	The standard error of 0.30 indicates that there is less variation in the calculated mean and the actual mean of the population. Thus, exhibiting that there is less variation in the social ratings of the companies, thereby evincing that the companies are focusing on social aspect.
Median	56	Median value of 56 denotes an overall encouraging scenario of the companies in the sense that median denotes the middle value in the data series, so the mentioned median value is quite on the higher side and social ratings are equally below and above this value.
Mode	57	Mode of 57 implies that this social score has been secured by substantial number of companies, thereby

		exhibiting that the overall scenario of social dimension is highly satisfactory.
Standard Deviation	9.314158988	A low standard deviation of 9.31 taking into account the large number of companies (959 companies) being studied, is a portent of corporate houses in large number are having proclivity towards social aspect.
Coefficient of Variation	17.5%	The coefficient of variation of 17.5% may be considered to be low thereby indicating less variability in the social ratings.
Kurtosis	1.659059632	A positive kurtosis indicates that data is peaked. Hence, it may be deduced that large number of companies have scored high on social parameter.
Skewness	-1.190789117	Since skewness value between -1 and +1 is generally considered to be excellent, so it may be surmised that the companies are performing exceedingly well on social ratings.
Range	61	The range value of 61 indicates the difference between the largest / maximum and smallest / minimum score that is 75-14 = 61. It is to be noted that this difference is too high, however the silver lining on the sky is that as per the data only two companies have scored 14 (working / analysis along with CRISIL ESG Ratings is enclosed separately)
Minimum	14	[redacted]
Maximum	75	

Table 3

Analysis of Corporate Performance on "G" Dimension

Variables	Values	Inferences
Mean	65.82898853	The mean or average value is quite high and it's a herald of high governance ratings being scored by substantial number of companies.
Standard Error	0.20407047	Standard error is quite low, thereby signifying that the variation is less between calculated and actual mean of the population. It may also be opined that majority of the corporate houses have performed exceptionally well on governance parameter thereby ratings being more or less same and so less variation.
Median	67	The median value is also quite high implying that values lying above it are high, thereby exhibiting that

		majority of companies scored high on governance yardstick.
Mode	68	This governance score has been secured by majority of the companies, thereby indicating that companies performance on governance dimension is highly satisfactory.
Standard Deviation	6.319598217	A low standard deviation indicates that there is consistency in the governance ratings of the companies.
Coefficient of Variation	9.6%	Low coefficient of variation means less variability in the data series, i.e. less variation in the governance ratings of the companies which is a sign of consistency in performance of companies with respect to governance facet.
Kurtosis	5.37032205	Positive kurtosis means peakedness of data, thereby indicating that substantial number of ratings have secured very high ratings on governance.
Skewness	-1.498962207	The skewness value is -1.5, which despite being negative may be considered as satisfactory, as generally skewness value of -1 to +1 is considered excellent.
Range	53	The range of 53 indicates the difference between the largest / maximum and smallest / minimum values of governance ratings (81-28=53). Further, in comparison to environmental and social parameters, the performance of the companies on governance yardstick is superior.
Minimum	28	
Maximum	81	

Thus, by applying descriptive statistics on ‘E’, ‘S’ and ‘G’ ratings secured by various corporate houses it may be opined that the performance of the companies on the mentioned parameters has been more or less satisfactory. As it may be observed from the values computed under various variables that companies have performed exceedingly well for E. S and G components. In case of environmental dimension, on observing some values like Mean (40.92), Median (40), Mode (41), Kurtosis (0.65) and Skewness (0.36) it may be stated that it is an indication of growing awareness regarding preservation of environment by the companies in terms of reducing green house gas emission, ensuring waste management, reduction in air and water pollution etc.

On observing the values covered under various variables of social dimension, such as Mean (53.30), Median (56), Mode (57) and Kurtosis (1.66) are metaphor of positivity in social governance. It implies that corporate houses are taking care of society by various ways such as community relations, funding of projects or institutions that are providing succor to the poor and underserved communities, ensuring customer satisfaction levels, embracing diversity, equity and inclusion in their corporate philosophy, providing fair pay to their employees including a living wage etc.

Lastly, the governance dimension is also being taken care of by the corporate houses, as manifested from the Mean (65.83), Median (67), Mode (68) and Kurtosis (5.37). These values demonstrates the commitment of the companies to uphold the tenets of good governance in various ways like robust leadership and management, emphasizing board diversity, transparency in executive compensation policies, ensuring financial transparency and business integrity, regulatory compliance and so on and so forth.

It is to be noted that the companies considered for the research study have also performed quite satisfactorily on other values also such as standard deviation, coefficient of variation, range etc. thereby signifying adoption of holistic approach by the companies towards ESG.

F-Test (One Factor Model): This statistical tool will assist in determining whether there is a significant difference or not in the 'E', 'S' and 'G' ratings assigned by CRISIL to the companies.
To comprehend whether the companies performance on 'E', 'S' and 'G' are on equal footing or there exists a difference, F-Test (One Factor Model) have been applied on the ESG ratings of CRISIL. The hypothesis formulated for conducting the analysis is as under:

***Null Hypothesis (H_0)*: There is no significant difference in the ESG ratings of the companies.**
***Alternative Hypothesis (H_1)*: There is a significant difference in the ESG ratings of the companies.**
The results of the F-Test (One Factor Model) is provided below-

Anova: Single Factor						
SUMMARY						
Groups	*Count*	*Sum*	*Average*	*Variance*		
Environmental Score	959	39239	40.91658	104.0703		
Social Score	959	51116	53.30136	86.75356		
Governance Score	959	63130	65.82899	39.93732		

ANOVA						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	297594.4	2	148797.2	1934.432	0	2.998857065
Within Groups	221069.2	2874	76.92039			
Total	518663.6	2876				

Decision: Since the calculated value of F=1934.432 is greater than the tabled value of $F_{0.05}$=2.998, so that the null hypothesis is rejected. Hence, there is a significant difference in the ESG Scores of the companies considered for the research study.

Apart from the statistical analysis, to comprehend the relevance of ESG in corporate performance, some select research studies have been covered in this article. Study of environmental, social and governance (ESG) facets and firm performance is significant for globally understanding how sustainable practices ensure long-term profitability and competitiveness in diverse markets (*Umakanta Gartia, Ajaya Kumar Panda, Apoorva Hegde, Swagatika Nanda, Environmental, social and governance aspects and financial performance: A symbiotic relationship in Indian manufacturing, Cleaner Production Letters, Volume 7,2024)*. The research study embracing an integrated approach have analyzed the environmental, social and governance aspects and their relationship with corporate value in terms of two distinct hypothesis, i.e. financial performance and market value. This study has simultaneously considered all the three dimensions, i.e. E, S and G individually, thereby providing an all-inclusive approach and an extensive view of their combined impact on corporate value to have insights for sustainable investments (*Liliane Cristina Segura, Abu Naser, Rute Abreu and Jose Angel Perez-Lopez, ESG Dimensions and Corporate Value: Insights for Sustainable Investments, MDPI*).

In another research study, environmental, social and governance (ESG) scores and financial performance of publicly listed companies in Turkey has explored whether the endeavours of businesses on environmental, social and governance (ESG) investments have reflected in their financial performance and in this regard, the impact of ESG scores of non-financial firms between 2009 – 2019 on market based and accounting based performance indicators were observed and it was found that ESG scores positively impacted the performance indicators of companies. Further, the additional analysis using the sub-components of the ESG revealed that while all the three elements of the environmental facet influence performance positively, some sub-components pertaining to the social and corporate governance facets are not statistically linked to performance (*Gökhan Özer*, *Nagihan Aktaş* *and İlhan Çam, Environmental, Social, and Governance (ESG) Scores and Financial Performance of Publicly Listed Companies in Turkey, Eskişehir Osmangazi Üniversitesi İktisadi ve İdari Bilimler Dergisi*).

Conclusion

From the CRISIL ESG scores analysis, it has been observed that majority of companies across all the sectors have fared quite well on the E, S and G parameters. This is a positive sign as it indicates that companies along with increasing productivity and profitability are also showing predilection towards environmental, social and governance elements, thereby exhibiting an inclusive approach on the part of the companies.
ESG have been ensconced by the corporate sector, as globally it has been realized that unless and until the 'Mother Nature' is preserved, business activities cannot be continued for long, as business organizations existence is

dependent on the natural resources. If we consider any sector, whether coal, cement, steel, automobile etc. all draw resources of various forms from the nature and in the process of converting them into finished products, it exerts an impact on the environment and society, thereby affecting them through green house gas emissions, air and water pollution, biodiversity loss, natural resource depletion and so on and so forth.

Thus, it necessitates for holistic approach on part of the corporate sector to take utmost care of environment. Along with environment, social and governance dimensions are equally significant, as employees, suppliers, community relations, board composition and its diversity, regulatory compliance and risk management initiatives etc. also play a pivotal role in ensuring sustainability, profitability and growth of the organization.

The aforesaid analysis based on CRISIL ESG ratings have underpinned the soaring proclivity of the companies towards environmental, social and governance which is a metaphor of inclusive approach. However, as mentioned that ESG is an ocean and unless and until other crucial dimensions of ESG are not studied, it is next to impossible to comprehend the complete picture of ESG.

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