



An Impact of Environmental, Social and Governance (ESG) Disclosure on Market Capitalization of Selected Maharatna Companies: An Empirical Study

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ABSTRACT

In this article, we examine the relationship between market capitalization and Environmental, social, governance (ESG) factors. Using the secondary data disclosed in the annual reports of some selected Maharatna companies, analysis of the ESG performance on market capitalization has been carried out. It has been observed that companies having complied with ESG disclosure practices result into increase in market capitalization. The correlation of these two elements indicates a better coordination between investor value sustainability and socially responsible practices. The findings of the study emphasize on importance of ESG consideration for investors as well as to provide the view into financial implications of sustainable business practices. These results have the implications for companies seeking to improve their ESG disclosure practices and attract investors who value sustainability.

INTRODUCTION

ESG (environmental, social, and governance) concerns are receiving a lot of attention in the business sector because of their effects on sustainability and corporate success. Investors are more likely to take these considerations into account when forming investment decisions as firms work to integrate ethical principles into their operations.



In India, some public sector companies (PSEs) have achieved remarkable financial performance that shows a strong growth line has termed as Maharatna classification. Maharatna companies are a recognized category of Public Sector Undertakings (PSUs) in India. The term "Maharatna" implies "An extraordinary gem" in Hindi. These companies are considered to be of immense significance to the nation's economy and have critical worldwide impact. . Maharatna companies are more independent in making monetary decision without any government intervention. There are total 13 Maharatna companies in India as of year 2023.

The findings of this research will have significant implications for both investors and policymakers. They can also use these insights to develop regulations and frameworks that encourage companies to adopt more sustainable practices, ultimately benefiting the economy and society as a whole. To ensure accuracy and reliability, this study has utilized comprehensive data set comprising financial indicators, ESG ratings, and market capitalization from multiple credible sources.

In conclusion, this empirical research aims to contribute to the existing environment in relation to ESG performance and market valuation by specifically focusing on the Maharatna group of company in India. By unravelling the relationship between market capitalization and ESG performance, this study provides valuable insights that can drive more sustainable practices within these influential corporations.

OBJECTIVES OF THE STUDY

1. To focus on determining ESG disclosure score by observing all potential factors disclosed in the annual reports of selected Maharatna companies.
2. To examine the positive or negative correlation between ESG disclosure practices and market capitalization with the help of rank correlation.
3. To provide insights for companies on the potential benefits of improving their ESG performance and communicating it to investors.
4. To suggest how ESG disclosure practices can be accurate which may help investors to take appropriate investment decision in lieu of sustainable investing through corporate transparency.

WHAT IS ESG?

ESG is a system for assessing the ethical impact and sustainability of a business or investment. Environmental factors include things like the utilization of natural resources, waste management, and carbon emissions. Similarly, workplace regulation, product, security of employees etc. are examples of

social element. Governance is the formation of management, responsibility and accountability of an organization.

Investors and stakeholders who want to evaluate a company's long-term viability and ethical behaviour must include ESG components. ESG indicators are increasingly being used as a tool for risk management and the assessment of investment opportunities.

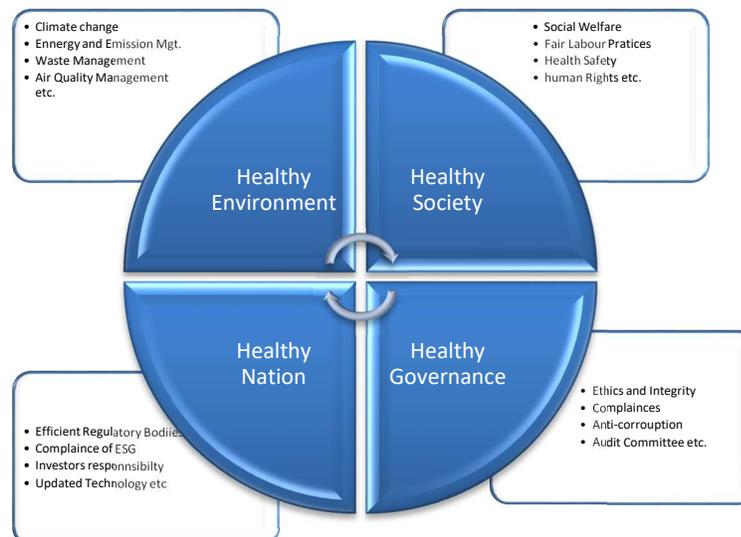
The SEBI (Securities and Exchange Board of India) issued a circular on July 12, 2023 to strengthen the reporting of ESG performance for listed businesses by incorporating audits and value chain disclosures. The top 1000 listed businesses (by market capitalization) to which BRSR (Business Responsibility and Sustainability Report) reporting applies are required by the new legislation to receive 'reasonable assurances' on all nine indicators of BRSR Core, a framework created by the ESG Advisory Committee based on National Guidelines.

RESEARCH PARAMETERS

In this article mainly secondary data have been used for research purposes. Secondary data refers to data of annual reports published by Maharatna companies and various other sources like NSE, BSE etc.

The study focused on the ESG (Environmental, Social, and Governance) disclosure of selected companies, using reports such as annual reports, Corporate Sustainability Reports (CSR), Business Responsibility and Sustainability Reports (BRSR) of selected companies. Three primary indicators used i.e. Environment, Social and Governance; was further examined through various sub-indicators or parameters to determine the ESG disclosure of the selected companies.

Fig 1: Implementation of ESG to Healthy Nation



For the environmental indicator parameters such as climate change, Energy and emission management, waste management, air quality management, use of renewable energy, water quality management, etc. were considered. The social indicator parameters included employee benefits, ensuring workplace security, fair labour practices, occupational and health safety, training and development, orientation programme, labour practices and human rights, etc. there are also governance indicator parameters that includes ethics and integrity, transparency in business, tax strategy, anti-competitive behaviour, anti-corruption, etc.

Based on these indicators and their parameters, ESG disclosure of selected companies was evaluated in relation to their market capitalization. The primary objective of this study is to explore the knowledge about sustainability that (ESG) Environmental, Social, Governance factors disclosed by Maharatna companies and their market capitalization. This research is exploratory in nature and ESG disclosure practices have been observed through annual reports from year 2018-19 to 2022-23. The Corporate Sustainability Report (CSR), Business Responsibility and Sustainability Report (BRSR) of different Maharatna companies have been gone through and compared with disclosure practices of companies to fix ESG Disclosure Score (ESGDS). The collected data has been retrieved, extracted, tabulated and presented in the form of tables and charts for the purpose of this research.

Fig 2: Process followed for Research and determining ESG Disclosure Score



ESG DISCLOSURE SCORE OF MAHARATNA COMPANIES

The study examines the combined ESG disclosure score value of the Maharatna companies based on ESG risk reporting with respect to the three primary indicators. Ultimately, to obtain ESG Disclosure Score the applied formula is:

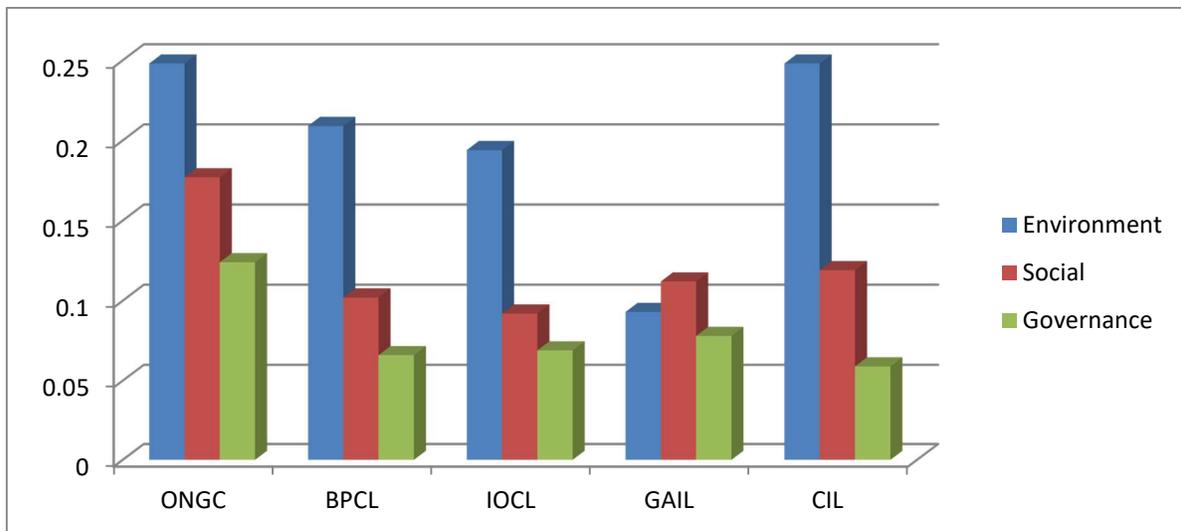
$$ESGDS = \frac{\text{Score obtained based on disclosure practices}}{\text{Maximum achievable score as per BRSR (i.e. 1)}}$$

Table 1: Allocation of ESGDS to selected companies

Name of Companies	Environmental Score (0-1)	Social Score (0-1)	Governance Score (0-1)	Total
Oil and Natural Gas Corporation	0.248	0.177	0.124	0.55
Bharat Petroleum Corporation Limited	0.209	0.102	0.066	0.38
Indian Oil Corporation Limited	0.194	0.092	0.069	0.36
Gas Authority of India Limited	0.093	0.112	0.078	0.28
Coal India Limited	0.248	0.119	0.059	0.42
Mean	0.198	0.120	0.079	0.398

Source: Derived from Annual Report based on their Disclosure Practices from 2018-19 to 2022-23.

Fig 3: Comparison of ESG score among selected companies



The above graph shows that among the entire ESG indicators, the environmental factor can have the most significant impact on market capitalization. The mean disclosure of environmental factor is 0.198 which is the highest among all the three indicators followed by social factors 0.120 and Governance factor 0.079. Based on these, it can be said that environmental factor have greater impact on the market value of



companies which shows that companies are now adopting more sustainable practices that ultimately benefit the economy and the society.

RELATIONSHIP BETWEEN ESG PERFORMANCE AND MARKET CAPITALIZATION

Table 2: Relationship between ESG Performance and Market Capitalization

Name of Companies	Market Capitalization (in crore)*	ESG Rating	Market cap. Rank	ESG Rating Rank
Oil Natural Gas Corporation (ONGC)	232923.87	0.55	1	1
Bharat Petroleum Corporation Limited (BPCL)	76346.85	0.38	5	3
Indian Oil Corporation Limited (IOCL)	130282.55	0.36	3	4
Gas Authority of India Limited (GAIL)	79986.09	0.28	4	5
Coal India Limited (CIL)	174651.72	0.42	2	2
RANK CORRELATION			0.7	

*Market Capitalisation as on 31st March, 2023.

Source: Calculated by researcher using Microsoft Excel

Degree of Correlation

00 - 0.25	Low
0.25 - 0.75	Moderate
0.75 - 1	High

Based on the above parameters, it has been concluded that there is a moderate degree (0.25 - 0.75) correlation between ESG performance and market capitalization. This means both the variables are moderately correlated with each other. If one variable changes, other variable also changes. Thus, if companies increase their ESG performance then their market capitalization will also increase in near future. The ESG performance may directly affect market capitalization of selected companies and companies' ESG performance may also attract investors to invest in their companies as more ESG score shows sustainability and long term benefits.



POTENTIAL BENEFITS OF IMPROVING ESG PERFORMANCE AND COMMUNICATING IT TO INVESTORS

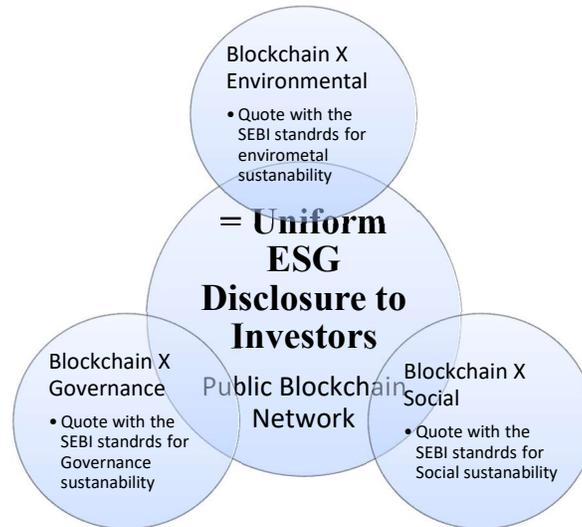
Potential benefits of improving ESG performance: Companies realize the benefits that they can receive by improving their environmental, social and governance (ESG) performance. ESG includes criteria for assessing a company's sustainability and social impact. By improving their ESG performance, companies can attract more socially responsible investors, improve brand image, reduce operational risk and promote long-term financial benefits.

Communicating ESG activities to investors: The positive relationship between ESG performance and market capitalization also emphasizes the importance of effectively communicating the company's ESG activities to investors. This requires transparent reporting and disclosure of ESG-related metrics. The companies can build up trust with investors by effectively communicating their ESG performance, differentiate themselves in the market and hence, companies can potentially experience an increase in their market value. Essentially, these insights highlight the potential link among improved ESG, effective communication to investors and a positive impact on a company's market value.

HOW TO MAKE ESG DISCLOSURE PRACTICES UNIFORM & ACCURATE TO INVESTORS

To enhance the ESG performance with transparency, the block chain technology can be employed. The present era is era of artificial intelligence and block chain can make the ESG disclosure more effective, transparent, traceable, and uniform for making such information available to investors automatically in time. Hence, empowering ESG with block chain in the following manner:

Fig 4: Employment of block chain technology to communicate ESG performance to investors:



i.e. (Blockchain X Environmental) + (Blockchain X Social) + (Blockchain X Governance) = Uniform ESG Disclosure to Investors

CONCLUSION

Presently, ESG is gaining more attention for sustainability of business as well as for investment. ESG disclosure not only shows companies commitment for environment and society at large scale but they also drive a company towards sustainability in long run. Thus, there could be a positive correlation between ESG disclosure practices and market capitalisation.

It has been observed in this study that companies with strong ESG performance tend to have higher market capitalizations, indicating that investors value sustainable and socially responsible practices. Furthermore, companies should adopt uniform ESG disclosure practices and understand the significance of communicating the same to valuable investors as per SEBI standards to increase their market value.

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