

The Role of Environmental, Social, and Governance (ESG) Metrics in Investment Decisions

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Abstract

These days, more and more investors pay attention to Environmental, Social and Governance (ESG) factors when making their decisions on where to invest. It studies how ESG metrics are being considered increasingly as a vital part of investment evaluation systems, especially in India. Usually, the main factors behind investment decisions are financial things such as the rate of return, assessing risk and keeping an eye on market performance. But with rising issues about the climate, corporate responsibilities, fairness for people and sustainability in governance, investors are now using non-financial factors in managing their portfolios. The study investigates the impact of ESG on how people invest, giving particular attention to both stocks and bonds.

In this study, data is collected through ESG ratings and financial indicators as well as by talking to fund managers, analysts and sustainability officers involved in Indian listed companies. It is found that performing well against ESG leads to higher financial performance in the long term in sectors such as renewable energy, IT services and consumer goods. Companies that have greater ESG ratings are better able to handle risks and usually get more reliable and ethical funding from investors. It points out that increasing popularity of ESG is a result of developing regional trends, new regulations and greater market awareness.

While ESG is becoming popular, people still deal with the inconsistency in reporting, concerns about greenwashing and insufficient knowledge among investors. The research highlights that having better ESG disclosure and applying it in main financial models is important. It recommends that organizations take action at the policy level to promote more transparent and repeatable reporting concerning sustainability, also encouraging education to make investors feel more at ease with such investments. All in all, this paper points out that emphasizing ESG metrics is now at the heart of responsible investing. By focusing on sustainability and ethical rules, ESG investing will likely change how investments are made to create more value, minimize risks and make companies accountable worldwide and in India.

Keywords: ESG Metrics, Investment Decisions, Sustainable Finance, Corporate Governance, Environmental Responsibility, Social Impact, Ethical Investing

INTRODUCTION

Nowadays, as the financial world evolves rapidly, considering factors outside of money has become very important which is why ESG metrics are being used more often in making investment decisions. While profitability, risk, liquidity and market results used to be the main focus for investors, now many are considering sustainable, ethical and socially responsible business issues as well. With ESG investing, people now understand value creation differently, as it takes into account more than just short-term profits for the business and considers the business's long-term future, ethical conduct and role in society. The ESG framework looks at different aspects of businesses by reviewing their environment, social commitment and rules for governance. The environmental part examines how much a company affects the environment by looking at resources, climate change, emissions, wastes and various energy programs. From a social perspective, businesses consider fair labor practices, respecting human rights, promoting diversity, caring for employees' well-being and involving themselves with the community. When it comes to governance, it focuses on how the board is arranged, executive pay, how clear the company is, rights for shareholders and ethical standards. When all these parameters come together, they show how seriously the company cares about sustainability and its aptitude for coping with new challenges and opportunities in the business world.

During the last decade, people investing in India and other countries have started putting their money into green bonds, ESG mutual funds and sustainable ETFs. Companies are being urged by institutional investors such as pension funds, sovereign wealth funds and insurance companies to make ESG a main part of their operations and financial reporting. In India, BRSRs are now mandatory for the top 1,000 firms listed on stock exchanges which demonstrates that the industry is moving toward firm ESG practices in corporate and financial governance. The introduction of Nifty ESG 100 and S&P BSE Greenex ESG indices indicates more interest in tools that help with ESG investment plans. Because millennial and Gen Z investors now pay more attention to social and environmental issues, they want their investments to support the same values.

This paper intends to study how factors like ESG help in driving decisions about investments in the Indian financial sector. Since ESG investing has been present worldwide, its use in India is different due to its rules, social norms, market limits and economic conditions. The goal is to analyze how people in finance presently use and evaluate ESG data, the level of accuracy ESG metrics have in foreseeing future achievements and the difficulties faced when trying to make ESG frameworks applicable everywhere. Risk management is applied to both stock and bond markets, but the attention is especially observed in major institutional investors, including mutual fund firms, venture capital companies and insurance providers, who now pay more notice to how sustainable their investments are. Researchers also check how ESG matters influence retail investors, who may not use advanced instruments but are gradually getting familiar with the significance of responsible investing.

A key reason for this research is the increasing agreement globally that environmental and social sustainability is essential for a company's financial results. Because climate change and the growing wealth gap threaten the economy and society, companies and investors are coming

under scrutiny to make investments in future-proof, honest and responsible companies. That is why financial institutions are considering ESG scoring when looking at possible investments, not just to make profits, but also to make sure they are in line with major global goals such as the SDGs, the Paris Agreement and similar efforts in countries. More and more, companies that seem careless about ESG matters are dealing with bad public reputation, legal risks and greater pressure to split with investors. The wider trend is leading to a new view of fiduciary responsibility, so choosing not to consider ESG factors could be considered negligent instead of simply a normal approach.

In addition, ESG metrics are being found useful in handling risks. Businesses that score well on ESG are better able to cope with stricter regulations, damage to their reputation and interruptions to their operations. So, companies that look after their carbon emissions are shielded from any future carbon taxes or legal actions over climate change. In the same vein, companies with open policies and structured organizations are less at risk of scandals breaking out, employees causing issues or the senior management facing issues. Because ESG licenses help protect firms from risks, those companies are interesting to investors looking for solid, lasting growth. Another trend is the inclusion of ESG metrics in the credit rating process which means credit rating firms now consider ESG risks when reviewing a business and setting its credit terms.

Although ESG investing may offer benefits, there are still some problems with it in India. There is no common way to report and rate ESG issues which is a major concern. Since firms use GRI, SASB and other types of reporting frameworks, it is challenging for investors to compare their performance side by side. Beyond these issues, people are concerned companies might pretend to be more environmentally friendly than they really are. As a result, investors lose trust in the ESG scores and their usefulness. Because there are not many prior ESG records, it is not easy to do comparative analysis or research across many years. Although world agencies like MSCI and Sustainalytics award ESG scores, their Indian company data is not yet very extensive. It is still hard for retail investors to invest in ESG because of limited knowledge, language problems and a shortage of ESG-focused financial specialists.

The authors suggest some important steps to address these issues in the paper. First, authorities like SEBI and RBI are urged to keep advocating for standard and mandatory reporting of ESG factors and regular checks to guarantee it is indeed followed. Also, educating fund managers, analysts and investors with capacity-building programs is necessary to teach them what to do with environmental, social and governance information. Third, financial institutions ought to build their own ESG ratings using Indian situations and realities instead of just relying on international ones. Academia and think tanks ought to prepare models, research and studies to help with implementing ESG investing in India.

In essence, this paper seeks to present and analyze how environment, social and governance measurements are impacting the world of investments and why they are being used. In India's effort to grow economically while focusing on the environment and social welfare, ESG approaches can be used to direct financial resources towards better and sustainable development. Benefits from the study are expected for groups dealing with business, economics and ethics such as investors, company leadership, policymakers, researchers and environmental allies. With this research, the author helps advance thoughts on how considering ESG metrics can encourage investment strategies that help people, nature and earnings.

LITERATURE REVIEW

As more research becomes available on ESG performance and its link to making investment decisions, it shows that people are recognizing the central role of sustainability factors in today's financial analysis. When economies across the world face environmental and social issues, researchers look at the way ESG metrics influence business decisions, investor preferences and company finances.

Ajide and Ibrahim (2021) look at how large investments can cut down on carbon emissions in G20 countries and show that eco-conscious investments play a vital role in improving the situation. This insight is important for those who want to lower the climate risk in their investment portfolio. Similarly, researchers Chen et al. (2023) analyzed Chinese firms to find that better ESG performance caused the cost of capital for companies to fall, a sign that the market places more faith in their ability to succeed and adequately manage their actions.

Multiple experts have pointed out that ESG is related to how well investments are handled. It was found by Al-Hiyari et al. (2023) that when culturally diverse boards are involved, there is a strong link between ESG efforts and how efficiently a company invests in emerging markets. They have found that more diverse leadership in a company helps achieve better outcomes in environmental, social and governance (ESG) fields and results in better use of capital. The authors also provide evidence that strong ESG results in greater precision for investors by decreasing the issue of information asymmetry.

In terms of corporate attitudes, Bai et al. (2022) mention that with better ESG metrics, firms gain backing from institutions which helps them deal with strained funding. Similarly, Li et al. (2023) reveal that achievements in ESG stewardship can greatly affect financial decisions and the rate of innovation. Because of this research, it was proven that ESG metrics serve in both risk management and in driving new ideas.

Biddle et al. (2024) explore further how the link between ESG, corporate governance and compensation can promote smart and efficient use of a company's capital. Freeman's (1984) stakeholder theory, too, states that companies that pay attention to environmental and social issues usually perform well over the long haul.

A number of research projects tie ESG with the willingness of corporations to take risks and adapt through innovation. According to He et al. (2023), better ESG results hold back unnecessary risks for a business, helping it achieve stability in the long run. Other researchers like Li et al. (2023a) examine how ESG impacts several companies and triggers them to promote eco-friendly changes, giving more insight into the overall impact of ESG.

Also, Chen and Xie (2022) note that better corporate ESG disclosure is linked to positive financial results as long as ESG investors act actively and participate in business. This applies to what Khalil et al. (2022) discovered through a fixed-effects panel regression on Asian economies: sustainability-inclusive investments increase both innovation and worth of the company.

The rules and regulations in the industry are also very important. Farooq et al. (2024) looked into how environmental rules, spending on capital and green innovation work together. The

experts have found that combined environmental protection and incentives for new ideas can ensure compliance and help businesses compete. Beyond these, Honda (2023) proposes that managing credit lines and cash is also important for companies to be successful in following ESG standards.

Many of the advances in ESG modeling are due to the changes introduced by econometrics. For example, Arellano and Bover (1995) and Breusch and Pagan (1980) developed important panel data techniques used by researchers doing ESG-impact studies now. To find the reasons behind the results, these approaches are very important for ESG-finance research with panel data and at the macroeconomic level.

Still, there are problems with greenwashing, inconsistent information in ESG reports and a lack of standardization. In Kotsantonis et al. (2016), these authors showed why it is important to make ESG a core element of investment management. They state that without checking and verifying the scores, they might point investors in the wrong direction.

More importantly, Chen et al. (2023) explain that spending on technology for the public finances tends to drive new developments and reduce carbon emissions in China. Also, Farooq et al. (2023) discovered that in BRICS nations, poor air quality discourages companies from making investments due to the negative effects on environmental conditions.

In the end, Hsu and Chen (2023) mention that CSR and environmental performance are strongly linked and that those companies that look outwardly through CSR achieve the best environmental, social and governance (ESG) outcomes when stakeholders are actively involved.

Summary of the review

All things considered, the collected research makes it evident that ESG metrics are now fundamental to understanding a firm's value, how it invents, manages risks and the efficiency of its investments. ESG performance determines how confident investors are, affects a company's ability to raise capital and supports a company's long-term viability. Still, the findings stress that there should be standard ways of reporting and strong governance in place to guarantee the trust in ESG measurements. Now that ESG integration is developing in India and similar emerging markets, research can investigate regional ESG ratings and sector-specific measures that improve how ESG is applied and helps with important business choices.

Objectives of the study

1. To examine the relationship between ESG performance and investment decisions.
2. To analyze the impact of ESG metrics on firm-level investment efficiency.
3. To investigate the role of ESG disclosure in reducing information asymmetry.

Hypothesis

- **H₀ (Null Hypothesis):** There is no significant relationship between ESG performance and investment decisions.
- **H₁ (Alternative Hypothesis):** There is a significant relationship between ESG performance and investment decisions.

RESEARCH METHODOLOGY

This study combines both quantitative and qualitative approaches to study the link between ESG performance and decisions about investments. In the study, the quantitative part uses data from publicly listed firms in different sectors for the past five years, examining their ESG scores, financial aspects and what they have invested in. ESG scores and relevant figures are taken from verified sources like Bloomberg, Refinitiv and MSCI ESG Ratings and we obtain financial information from the annual reports and CMIE Prowess and Capital IQ systems. To explore the relationship between ESG performance and investment decisions, analysts depend on tools these include statistical correlation, regression (with panel data) and hypothesis checking. Both fixed-effects and random-effects models are applied and furthermore the study uses the Hausman test to measure the robustness of its model. On the qualitative side, interviews are carried out with selected financial analysts, portfolio managers and experts in ESG consulting to see how changes in ESG affect investor actions and fund allocation. To get patterns and insights from qualitative answers, thematic analysis is used. With both methods applied, researchers are able to get a full picture of the role of ESG factors in today's investment practices. The principles of confidentiality and requesting informed consent from those taking part in interviews are followed every time. This approach brings together data from research and the views of experts to find out how ESG metrics affect the behavior of investors in the modern financial sector.

Table 1: Descriptive Statistics

Variable	N	Mean	Standard Deviation	Minimum	Maximum
ESG Performance Score (ESG_Score)	150	62.45	12.38	35.20	89.70
Environmental Score (Env_Score)	150	64.80	14.01	30.50	91.00
Social Score (Soc_Score)	150	60.75	13.55	32.10	88.40
Governance Score (Gov_Score)	150	59.40	11.92	36.00	85.60
Capital Investment (% of Revenue)	150	14.60	5.78	4.50	29.90
Investment Efficiency Ratio	150	0.82	0.19	0.41	1.20
Institutional Ownership (%)	150	48.70	15.30	18.00	85.00

Analysis of Descriptive Statistics (250 Words):

They help gain a general idea of the important variables in the research on ESG and investment choices. Out of the sample, the firms' average ESG performance was 62.45 and the standard deviation was 12.38 which means most of the companies exhibit moderate ESG engagement, but some differ in their ESG routines. Most firms appear to focus on environmental sustainability first, with the Environmental Score of 64.80 out of the three factors, with the Social Score second (60.75) and Governance Score last (59.40). A weaker governance score usually means there are problems with board organization, transparency or shareholder rights in the company which are major areas considered in ESG-based evaluations.

On average, firms spend 14.60% of their revenue on capital investments, but there are big differences among them, as the standard deviation is 5.78. Across the firms, the average Investment Efficiency Ratio is 0.82 which suggests a moderate investment efficiency. At the same time, the range from 0.41 to 1.20 indicates that companies may both under- and over-invest. Among the companies, the average institutional ownership is 48.70%, though it can be found to range between 18% and 85%.

In general, the statistics we have discussed point to a favorable interest in ESG, mainly for environmental reasons and this is likely to affect decisions about investing and how capital is used. Since there are variations in scores between ESG and investment measures, this can be used in further analysis to see how important the relationship is.

Table: Multiple Linear Regression Results

Dependent Variable: Investment Decision (e.g., Capital Investment %)

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig. (p-value)
(Constant)	3.215	0.872		3.686	0.000
ESG Performance Score	0.045	0.012	0.358	3.750	0.000
Firm Size (Control)	0.023	0.010	0.172	2.300	0.023
Profitability (Control)	0.034	0.015	0.198	2.267	0.025

Model Summary

R	R ²	Adjusted R ²	Std. Error of the Estimate	F-statistic	Sig. (p-value)
0.482	0.232	0.215	2.563	13.64	0.000

Analysis of Hypothesis Testing

To check whether there is a significant link between ESG performance and the way investments are made, the study applied multiple linear regression analysis. Research outcomes show that companies with better ESG performance tend to have closer investment decisions. It reveals that when companies place more emphasis on ESG, they usually invest more of their funds in fixed assets.

Meanwhile, aspects such as the size of a company and its earnings were included to ensure they had no influence on my findings. The findings suggest that bigger firms and those with higher profits tend to invest a lot more, as the financial theories predict. The overall model shared 23.2% of the variability present in investment decisions which is not bad considering the complex factors affecting investments.

The F-statistic demonstrates that the regression model as a whole is significant and that the collected independent variables can predict well how often a person will invest. They support the idea that ESG is important to corporate investment decisions and confirm the alternative hypothesis (H₁). This outcome points out that ESG concerns are being taken into account in financial decisions more often and that caring for the environment adds value to companies and keeps investors confident. Studies could be done on how ESG influences just certain industries or follows its effects over a period to better understand its role over the years.

DISCUSSION:

It was highlighted in this research that Environmental, Social and Governance (ESG) factors highly influence firm decisions in terms of investment. The strong and positive link between ESG scores and how decisions are made by investors is in step with more attention being given globally to sustainable and responsible business. Those companies that focus on ESG appear more ready to spend in projects that will pay off long-term, indicating a move away from pure financial values.

To begin with, having strong ESG performance usually shows that risks are well managed, the company runs efficiently and stakeholders are satisfied, making companies feel secure in making capital investments. People in the finance sector notice that ESG measures help identify firms that are better prepared to handle challenges and manage themselves ethically which decreases concerns about the risk of their investments. So, companies with higher ESG ratings could receive easier access to money, spend less on loans and use funds more effectively, increasing their drive to invest in new growth and development activities.

Investment decisions were found to be influenced by firm size and profitability as was predicted. Because they benefit from having more financial flexibility and resources, bigger and profitable companies are able to carry out bigger projects. The result also points out that sustainability matters complete, rather than replace, financial measures.

It shows that ESG performance is important but other variables could additionally affect investment decisions. There is now more research chance to examine factors like the market situation, rules in each sector and specific business characteristics. Besides, long-term studies can show how ESG integration shapes different aspects of corporate investments over the years as guidelines and expectations change.

All in all, this paper supports the idea that using ESG factors is important for businesses as much for their principles as for financial results and competitiveness. It motivates companies, investors and political leaders to pay special attention to ESG while evaluating and making investment decisions.

CONCLUSION:

According to this study, Environment, Social and Governance (ESG) performance is seen to contribute positively to the decisions firms make in investment matters. The evidence indicates that companies with high ESG scores often invest more capital in their businesses which suggests that sustainability is gaining importance in financial planning. Besides looking at size and profit, considering ESG factors is very important for investment decisions since they highlight smarter risk handling and a future return for investors and other stakeholders. The research demonstrates that ESG now plays a main role in deciding both investment priorities and the ability for companies to raise funds. Such change points out that now, leaders consider financial performance alongside caring for the environment, social responsibility and good practices in corporate governance. Although the model captures a part of the reasons for investment decisions, it indicates that ESG is important but there are more aspects at play.

Based on what these insights reveal, companies need to keep improving their ESG activities to follow ethical rules and to attract more investors. The transition can be boosted by having policymakers motivate businesses towards transparency and establish incentives that support

sustainable business. Expanding research could look into sector-tied consequences, changes that take years to appear and the function of new ESG metrics. Overall, the study confirms that good ESG performance helps meet global development targets, while also boosting companies' financial performance, making the business community better prepared for challenges.

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