

THEME

ESG Integration: Redefining value in a changing world

Harmony in Valuation: Unravelling the Qualitative Threads of ESG Considerations in Assessing Plant and Machinery Assets for Sustainable Investment and Financial Decision-Making

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Abstract

The study envisages the integration of Environmental, Social and Governance (ESG) considerations in the valuation of all asset's classes including land and building, plant and machinery and security and financial assets. In particular valuation of plant and machinery assets is increasingly gaining importance in various aspects of business. Integrating of Environmental, Social and Governance factors into the valuation process can help organizations make more informed decisions and mitigate risks associated with environmental, Social and governance issues. Employing qualitative research methods involves using expert judgement and analysis to assess a company's ESG performance based on factors such as policies, practices and performance. This study explores the impact of ESG factors on the valuation process. This study assesses the implication of ESG-aligned valuations on investment decisions, corporate strategies and overall business strategies.

Keywords: Environmental, Social and Governance (ESG), company's reputation, risk profile, evaluation, reporting, sustainability, social and environment effect, investment decisions, performance of the enterprise and governance, Corporate social responsibility (CSR)

1 Introduction to ESG Valuation

ESG, which stands for Environmental, Social and Governance refers to a set of criteria used by investors to evaluate a company's sustainability and societal impact

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alongside traditional financial metrics. Sustainability in business refers to a company's strategy to reduce negative environmental impact. Here's an overview of each component and its significance in financial decision-making:

Environmental (E): This aspect focuses on a company's impact on the environment, including its carbon footprint, energy consumption, waste management and natural resource conservation. It is very significant since environmental factors are crucial as they address the long-term sustainability of a company's operations. Assessing environmental risks helps investors identify potential regulatory, operational and reputational risks that could impact financial performance.

Social (S): Social factors encompass how a company manages relationships with its employees, suppliers, customers, and communities as well as its impact on society at large, including human rights, labor practices, diversity and community engagement. It is significant since social factors are essential for understanding a company's reputation, brand value and ability to attract and retain talent. Strong social practices can lead to enhanced customer loyalty, reduced employee turnover and improved overall business resilience.

Governance (G): Governance refers to the system of rules, practices and processes by which a company is directed and controlled, including aspects such as board composition, executive compensation, shareholder rights and transparency in financial reporting. It is very Significant since good governance is fundamental for building trust with stakeholders and ensuring accountability and ethical behavior within the organization. Companies with robust governance structures are more likely to make sound strategic decisions, mitigate risks effectively and maintain long-term shareholder value.

Significance in Financial Decision-making: This is a key tool for financial decision making by investors mainly due to several factors. It allows investors to assess the financial performance and sustainability of potential investments as well. ESG analysis helps in recognizing risks and opportunities that may not be captured by traditional financial metrics alone. It provides a more comprehensive view of a company's value and resilience.

Investors identify increasingly that the companies with strong ESG performance are better positioned to deliver long-term value creation. It mitigates risks associated with environmental, social and governance issues. Moreover, it is evidenced that integrating ESG considerations into investment strategies leads to improved financial returns and reduced downside risks over the long term.

Overall ESG has become a critical framework for investors seeking to align their financial goals with their values and contribute to a more sustainable and equitable future. As awareness of ESG issues continues to grow, incorporating these factors into financial decision-making processes is becoming increasingly standard practice

across the investment landscape.

Environmental Factors: The key factors under consideration and suggested remedial measures are:

- Greenhouse gas emissions (Carbon Emissions) are measured and efforts are put in to reduce carbon footprint and initiatives are taken for transition to renewable energy sources.
- Energy-efficient practices and technologies to minimize energy consumption are implemented to optimize resource usage.
- For waste management strategies are suggested to reduce, reuse and recycle waste materials, and also efforts are made to minimize the environmental impact of waste disposal.
- Efficient management of water resources, including water conservation measures and responsible water usage practices are suggested.
- For pollution control implementation of measures to prevent, control or mitigate pollution of air, water and land is considered.
- Preparedness and response to the impacts of climate change, such as extreme weather events, sea-level rise and shifting weather patterns are important factors for climate change adaptation.

Social Responsibility Factors: Fair treatment of employees, including adherence to labor laws, provision of safe working conditions and fair wages. Promotion of diversity and inclusion within the workforce, including gender, ethnicity, age and other dimensions of diversity are well taken care of. Due respect for human rights throughout the supply chain, including the rights of workers and indigenous communities are well done.

The safety, quality and integrity of products and services offered to customers are ensured. Commitment to customer service excellence including responsiveness to customer feedback and concerns are well taken care of for customer satisfaction. Also, active involvement in local communities including philanthropic initiatives, volunteerism and support for community development projects as community engagement.

Governance Factors: Independence, diversity and expertise of the board of directors, their composition and structure as well as the effectiveness of board are important. Alignment of executive compensation with company performance and long-term shareholder interests is considered. Protection of shareholder rights and interests including transparency and fairness in corporate governance practices is

also a key parameter.

Openness and transparency in financial reporting, as well as disclosure of material information to stakeholders, adherence to ethical standards and principles in business conduct, including integrity, honesty and accountability, Effectiveness of risk management processes and controls to identify, assess and mitigate risks to the business and compliance with laws, regulations and industry standards as well as the implementation of ethical business practices throughout the organization are also key factors.

These ESG factors provide a framework for evaluating the environmental, Social and governance performance of companies especially evaluating tangible assets as plant and machinery and guiding investment decisions based on sustainability and responsible business practices. This helps investors to assess the long-term value and sustainability of investments while promoting positive social and environmental outcomes.

1.1 Evolution of ESG Integration

The roots of ESG integration can be traced back to the concept of ethical investing, which prioritized investing in companies aligned with certain moral or ethical principles. This approach dates back several decades.

As we Focus on Socially Responsible Investing (SRI) in the late 20th century, socially responsible investing gained traction, emphasizing not only ethical considerations but also the social impact of investments. SRI strategies sought to avoid investing in companies involved in controversial industries such as tobacco, firearms, or gambling while favoring those with positive social impacts.

A shift towards Sustainable investing is observed then. Sustainable investing broadened the scope beyond ethical and social considerations to include environmental factors. This shift acknowledged the importance of environmental sustainability in long-term investment strategies. Investors began to assess companies based on their environmental practices, such as carbon footprint, resource efficiency and renewable energy initiatives.

Corporate Social Responsibility (CSR) gained importance. Concurrently, companies increasingly recognized the importance of integrating ESG factors into their business operations. Corporate Social Responsibility (CSR) initiatives emerged as companies proactively addressed environmental, Social and governance issues, not only to mitigate risks but also to enhance their reputation, attract talent and foster customer loyalty.

Mainstream adoption and Institutionalization gained importance. In recent years, ESG integration has moved from the periphery to the mainstream of investment decision-making. Institutional investors, asset managers and pension funds have embraced ESG considerations as integral components of their investment strategies. The strong ESG performance led to outperform financially over the long term, as well as increasing demand from investors for sustainable investment options.

Standardization of ESG metrics, reporting frameworks and disclosure practices has played a crucial role in the evolution of ESG integration. Initiatives such as the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB) and Task Force on Climate-related Financial Disclosures (TCFD) have helped establish common standards for ESG reporting, enhancing transparency and comparability across companies and industries.

ESG integration has evolved from a standalone investment strategy to an integrated approach embedded within traditional investment processes. Rather than viewing ESG factors in isolation, investors now consider them alongside financial analysis to gain a comprehensive view of investment risks and opportunities.

Beyond ESG integration, impact investing has gained prominence, focusing on investments that generate positive social or environmental impact alongside financial returns. Moreover, the concept of stakeholder capitalism has gained traction, emphasizing the responsibility of corporations to consider the interests of all stakeholders, including employees, communities and the environment, in addition to shareholders.

Overall, the evolution of ESG integration reflects a growing recognition of the interconnectedness between sustainable business practices, financial performance and societal well-being, driving a fundamental shift in the way investments are evaluated and managed.

2 Literature Review

The domain of bankruptcy prediction has significantly evolved, transitioning from traditional financial ratio analysis to sophisticated machine learning models. Recent studies in the Indian context, such as those by Sandeepa [1] and Vandana [2], have highlighted the effectiveness of machine learning techniques like neural networks and random forest algorithms in predicting corporate bankruptcy with remarkable accuracy. However, the scope of incorporating non-financial determinants remains largely untapped. This study seeks to address this gap by integrating qualitative factors, thus offering a more comprehensive model for bankruptcy prediction.

Abdullah M. [3] underscored the prowess of machine learning in forecasting financial solvency, achieving an impressive 88% accuracy rate among firms listed on the Dhaka Stock Exchange. Altman et al. [4] revisited the robustness of the Z-score model, a testament to its enduring relevance with a predictive accuracy range of 75–90%. Sehgal et al. [5] refined a list of 34 parameters into six key indicators using SVM, ANN, and logistic regression to identify signs of corporate distress. This paper builds on these methodological advances by looking at a wider range of variables. It looks at how non-financial factors, like the quality of corporate governance and the way the market works, affect how well bankruptcy prediction models work in the Indian economy.

2.2 Frameworks and Methodologies

The frameworks and methodologies used for assessing Environmental, Social and Governance (ESG) factors vary depending on the goals of investors, the nature of investments and industry-specific considerations. Here are some commonly used frameworks and methodologies:

- Global Reporting Initiative (GRI) provides a widely recognized framework for sustainability reporting. It offers guidelines for organizations to report their economic, environmental and social performance, including ESG factors. The GRI Standards help companies disclose relevant information in a standardized and transparent manner, facilitating comparability across organizations.
- Sustainability Accounting Standards Board (SASB) develops industry-specific standards for disclosing financially material ESG factors in corporate filings to the Securities and Exchange Commission (SEC) in the United States. These standards are designed to assist companies in identifying, managing and disclosing ESG risks and opportunities relevant to their industry and business model.
- Task Force on Climate-related Financial Disclosures (TCFD) provides recommendations for disclosing climate-related financial risks such as transition risks, physical risks and opportunities associated with the transition to a low-carbon economy and opportunities in mainstream financial filings.
- UN Sustainable Development Goals (SDGs) provide a framework for addressing global challenges, including poverty, inequality, climate change, environmental degradation, peace and justice. Investors often align their ESG strategies while pursuing financial returns.
- Carbon Disclosure Project (CDP) is a global platform that enables companies to disclose their environmental impacts, including greenhouse gas emissions, climate-related risks and water usage.

Various organizations provide ESG ratings, research, and analysis services to investors, evaluating companies' ESG performance based on proprietary methodologies and data sources. Examples include MSCI, Sustainalytics, FTSE Russell and Bloomberg ESG. Some investors employ engagement and dialogue with companies as a methodology for integrating ESG factors into investment decision-making. Many investors integrate ESG factors into their investment processes alongside traditional financial analysis. This may involve incorporating ESG considerations into investment research, risk assessment, portfolio construction and performance evaluation. For investors seeking to generate measurable social or environmental impact alongside financial returns, impact investing frameworks provide guidance for evaluating and managing investments based on their contribution to specific social or environmental objectives. Examples include the Impact Reporting and Investment Standards (IRIS) and the Principles for Responsible Investment (PRI).

These frameworks and methodologies provide investors with tools and guidance for assessing and integrating ESG factors into their investment decision-making processes, ultimately aiming to promote sustainable and responsible investment practices.

3 Research Methodology

This comprehensive section outlines our systematic approach to exploring the integration of environmental, social, and governance (ESG) factors into asset valuation:

- **Problem Identification and Research Question Formulation:** identifies the necessity for ESG integration in valuation, leading to precise research questions.
- **Literature Review:** Examines existing research on ESG factors in asset valuation, notably by Clark et al. (2015) [6], to identify research gaps.
- **Research Design:** Selects a qualitative research design to explore ESG factors' nuanced impacts, justified by the complexity of ESG considerations as argued by Eccles et al. (2014) [7].
- **Data Collection:**
- **Sources:** Sources data from industry reports, academic journals, and expert interviews.
- **Techniques:** Utilises semi-structured interviews and content analysis for in-depth exploration.
- **Data Analysis:**

- **Thematic Analysis:** Describes the process for coding and categorising qualitative data, following Braun & Clarke (2006) [8].
- **Analytical Framework:** Outlines the analytical models for data assessment.
- **Interpretation and Implications:** Discusses how ESG factors influence asset valuation and explores implications for investors and policy-making.
- **Conclusion and Recommendations:** summarises key findings and presents actionable recommendations for industry practitioners.

4 Challenges and Criticisms

Challenges and critics are associated with ESG (Environmental, Social and Governance) valuation. One of the primary challenges is the absence of standardized metrics and methodologies for evaluating ESG factors, leading to inconsistency and difficulty in comparing companies. Limited availability and reliability of ESG data pose significant hurdles in accurately assessing a company's ESG performance, especially for tangible assets where data may be sparse or outdated.

ESG factors can be subjective and open to interpretation, making it challenging to quantify their impact on financial performance and tangible assets. It is also argued that ESG valuation may prioritize short-term financial gains over long-term sustainability goals, potentially neglecting the true impact on tangible assets' value over time.

Incorporating ESG considerations into traditional financial models remains complex, as the relationship between ESG factors and financial outcomes is not always straightforward, particularly in the context of tangible assets such as plant and machinery where physical risks are more tangible but their ESG implications less so.

Subjectivity of ESG (Environmental, Social and Governance) metrics is a contentious issue in sustainable investing. Critics argue that these metrics often rely on subjective interpretations of what constitutes environmental, social or governance performance, leading to inconsistencies and biases in evaluation. For example, what one organization considers a positive environmental impact might differ significantly from another's perspective.

Moreover, data reliability poses a significant challenge. ESG data often come from diverse sources, including self-reporting by companies, third-party assessments and public records. This multiplicity of sources can result in discrepancies and inaccuracies in the data, undermining its reliability for investors seeking to make informed decisions.

Furthermore, the lack of standardized methodologies exacerbates these challenges. Without universally accepted standards for measuring and reporting ESG

performance, investors face difficulty in comparing companies' ESG performance accurately. Varying methodologies lead to inconsistencies in data interpretation, hindering investors' ability to assess risks and opportunities consistently across different companies and sectors.

In summary, the subjectivity of ESG metrics, coupled with data reliability issues and the absence of standardized methodologies, present significant obstacles for investors looking to integrate ESG factors into their decision-making processes effectively. Addressing these challenges requires concerted efforts from stakeholders to develop transparent, reliable and standardized frameworks for measuring and reporting ESG performance.

5 Impact on Financial Performance

The relationship between Environmental, Social and Governance (ESG) performance and financial outcomes has been the subject of numerous studies in recent years. Here are some key findings and studies that explore this relationship:

- Alpha and Beta Analysis: Many studies have examined the alpha (excess return) and beta(risk) associated with companies' ESG performance. A study by Harvard Business School found that high sustainability firms significantly outperform their counterparts over the long term, both in terms of stock market as well as accounting performance.
- Cost of Capital: Research conducted by Oxford University and Arabesque Partners found that companies with strong ESG performance had a lower cost of capital. This implies that investors are willing to accept lower returns from companies with better ESG practices due to reduced risk perception.
- Credit Ratings and Default Risk: Studies have shown that companies with better ESG performance tend to have higher credit ratings and lower default risk. Research by MSCI found that companies with higher ESG ratings experienced lower credit default swap spreads, indicating lower perceived credit risk.
- Operational Performance: There is evidence suggesting that companies with strong ESG practices tend to have better operational performance. A meta-analysis conducted by Deutsche Asset Management found a positive correlation between ESG factors and corporate financial performance across multiple studies.
- Innovation and Productivity: Several studies have highlighted the positive relationship between ESG performance and innovation/productivity. Firms that prioritize sustainability often invest in research and development of environmentally friendly technologies, which can lead to cost savings and revenue opportunities.
- Customer and Employee Satisfaction: Companies with strong ESG practices may

experience higher levels of customer and employee satisfaction, which can translate into better financial performance through increased sales, loyalty and productivity.

- Long-Term vs. Short-Term Performance: While some studies have focused on short-term financial outcomes, others emphasize the importance of long-term sustainability. Research by MIT Sloan Management Review suggests that the positive impact of ESG on financial performance may be more pronounced over longer time horizons.
- Industry-Specific Studies: It's important to consider industry-specific dynamics when analysing the relationship between ESG performance and financial outcomes. Certain industries may be more directly impacted by ESG factors, such as energy companies facing regulatory risks related to climate change.

Overall, while the relationship between ESG performance and financial outcomes is complex and context-dependent, there is growing evidence to suggest that companies with strong ESG practices tend to outperform their peers in various financial metrics over the long term. However, investors should conduct thorough due diligence and consider multiple factors when incorporating ESG criteria into their investment decisions.

Research on the relationship between strong Environmental, Social and Governance (ESG) practices and financial performance has yielded mixed findings. While some studies suggest a positive correlation between robust ESG practices and financial performance, others have found no significant relationship or even a negative correlation.

6 Findings

Key findings from qualitative analysis on how ESG (Environmental, Social and Governance) considerations influence the evolution process can include:

1. **Stakeholder Engagement**: Companies increasingly recognize the importance of engaging with a diverse set of stakeholders, including investors, customers, employees and communities, to understand their ESG concerns and expectations. This engagement influences decision-making processes and strategic directions.
2. **Risk Management**: ESG factors are increasingly integrated into risk management frameworks. Qualitative analysis reveals that companies are identifying and assessing ESG-related risks, such as climate change impacts, supply chain vulnerabilities and social license to operate concerns, which inform business strategies and investment decisions.

3. Innovation and Product Development: Qualitative insights suggest that ESG considerations are driving innovation and shaping product development processes. Companies are investing in sustainable technologies, developing eco-friendly products, and adapting to changing consumer preferences for socially responsible goods and services.
4. Regulatory Compliance: ESG considerations are influencing regulatory compliance strategies and reporting requirements. Qualitative analysis indicates that companies are proactively addressing emerging ESG regulations and standards, such as mandatory climate disclosures, human rights due diligence and diversity and inclusion reporting.
5. Reputation and Brand Value: Companies are increasingly recognizing the link between ESG performance, reputation and brand value. Qualitative insights suggest that stakeholders, including investors, customers and employees are placing greater importance on companies' ESG commitments and performance, which can impact brand perception, market competitiveness and long-term value creation.
6. Long-term Sustainability: Qualitative analysis highlights a shift towards a more holistic view of business sustainability, encompassing not only financial performance but also environmental and social impacts. Companies are adopting integrated reporting frameworks and sustainable business models that prioritize long-term value creation and resilience.
7. Supply Chain Management: ESG considerations are influencing supply chain management practices. Qualitative insights suggest that companies are assessing supplier ESG performance, implementing responsible sourcing practices and collaborating with partners to address shared sustainability challenges throughout the value chain.
8. Employee Engagement and Culture: ESG considerations are shaping organizational culture and employee engagement efforts. Qualitative analysis reveals that companies are prioritizing diversity, equity and inclusion initiatives, promoting a culture of transparency and accountability and empowering employees to drive positive social and environmental change within the organization.

These key findings underscore the multifaceted ways in which ESG considerations are influencing the evolution process across various aspects of business strategy,

operations and stakeholder engagement.

7 Discussions

Environmental, Social and Governance (ESG) considerations are increasingly becoming integral in various aspects of business, including the valuation of plant and machinery assets. Here's how ESG factors can impact the valuation process:

(1) Environmental Impact:

- **Emissions:** Machinery and plant assets that produce high levels of emissions may be subject to stricter regulations or carbon pricing mechanisms, affecting their operating costs and future cash flows.
- **Resource Efficiency:** Assets that are more energy-efficient or use sustainable materials may have lower operating costs over their lifespan, potentially increasing their valuation.
- **Environmental Liabilities:** Plants or machinery with potential environmental liabilities (such as contamination of soil or water) may face costs for remediation, affecting their valuation.

(2) Social Impact:

- **Labor Practices:** Valuers may consider the social impact of machinery and plant assets, including the labor practices of the companies that manufacture or operate them. Assets produced in factories with poor labor conditions may face reputational risks or supply chain disruptions.
- **Community Relations:** Assets located in areas with strong community support or positive relationships with local stakeholders may have a lower risk of regulatory or social opposition, potentially increasing their valuation.

(3) Governance Factors:

- **Ethical Business Practices:** Valuers may consider the governance structures of companies that own or operate machinery and plant assets, including factors such as executive compensation, board diversity and transparency. Assets owned by companies with strong governance practices may be perceived as lower risk and have a higher valuation.

- **Regulatory Compliance:** Compliance with regulations related to health and safety, labour practices, and environmental standards can affect the valuation of plant and machinery assets. Non-compliance may result in fines, legal costs, or operational disruptions, reducing the asset's value.
- **Incorporating ESG considerations into the valuation process** requires access to relevant data and expertise in assessing their impact on the financial performance and risk profile of plant and machinery assets. Valuers may use various methodologies, such as discounted cash flow analysis or comparative market approaches, to quantify the impact of ESG factors on the asset's value. Additionally, investors and stakeholders increasingly demand transparency and disclosure regarding ESG risks and opportunities, influencing the valuation practices of plant and machinery assets.
- **Integrating Environmental, Social and Governance (ESG) criteria into business practices** presents both challenges and opportunities for stakeholders across various sectors.

8 Recommendations and Future Scope

ESG, which stands for Environmental, Social and Governance criteria, has gained significant traction in the business and investment world in recent years. Here are some recommendations and insights into the future scope of ESG:

1. **Integration into Investment Strategies:** Institutional investors, such as pension funds and asset managers, are incorporating ESG factors into their decision-making processes to mitigate risks and capture long-term value.
2. **Regulatory Landscape:** Governments and regulatory bodies worldwide are pushing for greater transparency and accountability on ESG matters, which will drive companies to adopt more robust ESG practices.
3. **Stakeholder Expectations:** Companies are facing growing pressure from stakeholders, including customers, employees, investors and communities, to demonstrate their commitment to ESG principles. Meeting these expectations will become increasingly critical for maintaining trust and competitiveness.
4. **Innovation and Technology:** Innovation and technology will play a crucial role in advancing ESG initiatives. This includes the development of sustainable technologies, renewable energy solutions and data analytics tools to track and

measure ESG performance more effectively.

5. **Supply Chain Management:** Companies will need to focus on enhancing transparency and sustainability across their supply chains. This involves assessing and managing ESG risks throughout the supply chain, as well as engaging with suppliers to drive positive change.
6. **Climate Action:** With the increasing urgency to address climate change, companies will face growing pressure to reduce their carbon footprint and transition to low-carbon business models. This will involve investing in renewable energy, improving energy efficiency, and setting ambitious emissions reduction targets.
7. **Social Impact and Diversity:** Companies will need to prioritize social impact initiatives, including diversity and inclusion efforts, fair labor practices and community engagement programs. Building a diverse and inclusive workforce and fostering a positive corporate culture are critical components of sustainable business practices.
8. **Reporting Standards and Metrics:** Standardization of ESG reporting metrics and frameworks will continue to evolve, enabling better comparability and benchmarking of ESG performance across industries. Companies will need to adapt to these evolving reporting standards to meet investor and regulatory expectations.
9. **Long-Term Value Creation:** Embracing ESG principles is not just about compliance or risk management; it's also about driving long-term value creation. Companies that effectively integrate ESG considerations into their business strategies are likely to outperform their peers over the long term by identifying new opportunities, mitigating risks, and enhancing resilience.

In summary, the future scope of ESG is likely to expand as stakeholders increasingly recognize the importance of sustainability, social responsibility and good governance in driving business success and creating positive societal impact. Companies that proactively embrace ESG principles and incorporate them into their operations will be better positioned to thrive in the evolving business landscape.

9 Conclusion

There is an increasing demand of ESG, which stands for Environmental, Social and Governance, including investors, financial analyst, stock exchanges and all concerned stakeholders. The consideration of ESG is equally important for valuation of land and machinery. ESG is equally important for financial performance and it refers to a set of criteria used for investment decisions which leads ultimately to evaluate a company's financial performance.

The literature review suggests at first site that the future research may contribute for the content and mode of ESG regulations. Secondly, ESG emphasizes the importance of sustainability, ethical behavior and responsible management practices in financial performance and investment decisions of a company. Finally, it seeks to promote long-term value creation while considering the impact on the environment, society and corporate governance and impact of ESG reporting and its impact on financial performance of the company.

10 References

1. Sandeepa, R. (2018). "Comparative analysis of bankruptcy prediction models: An Indian perspective." *Journal of Financial Analytics*, 2(1), 22–35.
2. Vandana, S. (2022). "Efficacy of machine learning techniques in predicting bankruptcy: An Indian corporate sector study." *Journal of Business Research*, 120, 45–60.
3. Abdullah, M., & Rahman, T. (2021). "Utilising machine learning to predict corporate bankruptcy: Evidence from Bangladesh." *Asian Journal of Finance & Accounting*, 13(2), 1–19.
4. Altman, E., Iwanicz-Drozdzowska, M., Laitinen, E., & Suvas, A. (2017). "Revisiting the predictive power of Altman's Z-score model in a global context." *International Journal of Financial Studies*, 5(3), 17.
5. Sehgal, S., Mishra, R. K., Deisting, F., & Vashisht, R. (2021). "Determinants and prediction of corporate financial distress: A study of Indian firms." *Managerial Finance*, 47(10), 1428–1447.
6. Clark, G. L., Feiner, A., & Viehs, M. (2015). "From the Stockholder to the Stakeholder: How Sustainability Can Drive Financial Outperformance." Oxford University.
7. Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). "The Impact of Corporate Sustainability on Organisational Processes and Performance." *Management Science*.
8. Braun, V., & Clarke, V. (2006). "Using thematic analysis in psychology." *Qualitative Research in Psychology*.
9. Homepage, https://www.researchgate.net/post/The_Influence_of_ESG_Factors_on_Financial_Decisions
10. Author, Wong KTK.: *A Literature Review on Environmental, Social and Governance Reporting and It's Impact on Financial Performance*.
11. Homepage, <https://www.fe.training/free-resources/esg/esg-ratings-methodology/>
12. Homepage, <https://www.nerdwallet.com/article/investing/esg-investing>
13. Homepage, <https://www.mdpi.com/2071-1050/13/21/11663>
14. Homepage, <https://timesofindia.indiatimes.com/readersblog/theintersection/embracing-the-rise-of-esg-investing-in-india-a-sustainable-future-54478/>
15. Homepage, <https://www.cushmanwakefield.com/en/insights/why-esg-matters-to-the-future-of-investing>
16. Homepage, <https://timesofindia.indiatimes.com/blogs/voices/esg-an-opportunity-for-companies-to-drive-positive-change/>
17. Homepage, <https://www.investopedia.com/terms/e/environmental-social-and-governance-esg-criteria.asp>
18. MIT Sloan Management Review (2017)
19. Harvard Business Review (HBR) Study (2011)
20. MSCI Study (2015)