ESG Score and its analysis under Indian Perspective.

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Abstract:

ESG Score is an important score which indicates the contribution of the company towards environmental, social and governance elements of the system. There has been growing concern towards the sustainability of the resources present with the human beings. Growing temperatures, irreversible climatic exploitation and other factors effecting the environment have made human beings to take up such activities which can sustain the human life. In this regard Green Finance, Sustainable investment and other things are being employed. One of the most important change which can be seen in the recent times is Sustainability Reporting. In this type of reporting, there are different elements which are used to indicate the level of sustainability of the organization. Basically this report indicates that whether there is any kind of sustainability of the organization with respect to environment, Social and governance. This paper tries analyzing the mathematical background of Sustainable Reporting under Indian conditions. The ESG Scores of Indian companies are collected and analysis is done.

Keywords: ESG Score, Environmental Score, Social Score and Governance Score.

Introduction:

The **Environmental, Social, and Governance (ESG) score** has become a crucial measure in evaluating a company's ethical impact and long-term sustainability. The importance of ESG scores can be understood with help of the following points:

1. Abhishek Parikh, Divya Kumari, Maria Johann (2023)

ESG scores are being used more and more by investors to evaluate a company's risk and long-term survival. Because they are more likely to successfully handle environmental, social, and governance issues, companies with high ESG scores are frequently viewed as less hazardous. Strong financial performance is frequently associated with a high ESG score. Businesses that prioritize social responsibility, environmental impact, and sound governance are typically more robust and flexible in response to shifting market conditions.

2. Simona Galletta, John W. Goodell, Sebastiano MazzA, Andrea Paltrinieri (2023)

Companies with poor environmental practices might face legal risks, such as fines or shutdowns, and could experience reputational damage. Social issues like labor practices or human rights concerns, and governance issues like corruption or lack of transparency, can also expose businesses to legal and financial risks. A company's ESG reputation affects its relationship with consumers, investors, and the wider community. A strong ESG track record helps reduce reputational risks.

3. Dalit Gafni, Rimona Palas, Ido Baum, Dov Solomon (2024)

As regulatory bodies across the globe introduce stricter rules on environmental protection, labor rights, and corporate governance, an ESG score reflects how well a company adheres to these regulations. In some regions, companies may be required to disclose ESG-related activities and impact, and having a robust ESG score can ensure they meet these obligations.

4. Bellavite Pellegrini, Carlo & Caruso, Raul & Mehmeti, Niketa. (2019).

Companies with higher ESG scores can attract investments from funds and investors focused on sustainable and socially responsible investing (SRI). The rise of green bonds, ESG-focused mutual funds, and investment portfolios reflects growing demand for socially responsible companies. Many institutional investors, such as pension funds, also prioritize ESG metrics in their investment strategies, as they are viewed as less risky and better prepared for future challenges.

5. Cao, Yuxiao. (2023).

Modern consumers are more aware of sustainability and corporate ethics. A high ESG score can enhance brand loyalty, as consumers often prefer companies that align with their values, such as those that prioritize sustainability, fair labor practices, and social responsibility. Companies with strong ESG performance are also likely to be viewed as more attractive to potential employees, particularly those who value ethical corporate cultures. Higher employee satisfaction can improve retention, morale, and productivity.

6. Deb, R. Behra, A.,& Dusmanta, K. (2024).

Companies focused on environmental sustainability (e.g., reducing carbon emissions) and social responsibility (e.g., promoting diversity and equality) are more likely to position themselves for long-term success in an evolving world. A high ESG score often indicates that a company is actively planning for future challenges, such as the potential impacts of climate change, resource scarcity, or changing social dynamics, thus improving its chances of thriving in the future.

7. Kumar, S. (2023)

A good ESG score can enhance shareholder value by improving profitability and risk management. It also helps companies demonstrate accountability to shareholders, regulators, customers, and the broader society. A focus on governance means more transparency in operations, decision-making, and financial reporting, which can help build trust with stakeholders.

8. Seker, Yasin & Sengur, Evren. (2021).

ESG scores provide a standardized way to assess companies across different industries and regions, making it easier to compare firms based on their sustainability performance. This comparability helps investors and other stakeholders make more informed decisions.

9. **Qiqi, Wang & Zhaozhen, Song & Yingyue, Kang. (2024).**

Companies with high ESG scores often differentiate themselves from competitors in their market. This can translate into better access to capital, better relationships with suppliers and partners, and a stronger public image.

10. **Clement, Alexnadre, Robinot,E, & Trespeuch, L (2022).**

The importance of ESG scores is increasing as investors, consumers, and regulators demand more accountability and sustainability from businesses. A strong ESG score can enhance a company's reputation, reduce risks, attract investment, and ensure long-term growth. It has become an essential component of corporate strategy, as it signifies that a company is prepared for the future, both in terms of profitability and social responsibility.

Literature Review:

Environmental Score:

The **Environmental Score** within an **ESG (Environmental, Social, and Governance) Score** plays a critical role in assessing a company's commitment to sustainability and its long-term impact on the planet. This score evaluates how well a company manages its environmental responsibilities, including its impact on natural resources, emissions, and its role in addressing climate change. The importance of the Environmental Score in the ESG framework is growing as environmental concerns become more pressing worldwide. Here are several key reasons why the Environmental Score is particularly important:

1. Chengming Li, Wei Tang, Feiyan Liang, Zeyu Wang (2024): Companies with high environmental scores are those that actively reduce their greenhouse gas emissions, transition to renewable energy sources, and take steps to mitigate their impact on climate change. In an era of rising global temperatures, companies that contribute less to climate change are seen as more responsible. Businesses that focus on environmental sustainability are better equipped to adapt to the potential risks posed by climate change, such as natural disasters, water shortages, or extreme weather events. A strong Environmental Score indicates that the company is planning for a climate-resilient future.

2. Xiaomin Bao, Muhammad Sadiq, Weiling Tye, Jing Zhang (2024)

As governments worldwide enact stricter environmental laws and regulations (such as carbon emission limits, waste management standards, and pollution control), a high Environmental Score indicates a company's proactive stance in meeting or exceeding these legal requirements. Failure to comply can lead to fines, legal actions, and reputational damage. Companies with poor environmental performance are at a higher risk of facing environmental lawsuits, clean-up costs, and regulatory penalties. A positive Environmental Score signals better risk management practices in these areas.

3. Hua Tang, Langyu Xiong, Ru Peng (2024)

Investors are increasingly focusing on companies with strong environmental practices, often through funds that emphasize sustainability (e.g., green funds or ESG-focused portfolios). Companies with a higher Environmental Score tend to attract more capital from investors looking to support businesses that are mitigating their environmental impact and are future-proof. Companies that prioritize the environment tend to have more sustainable business models. A solid environmental track record can be seen as a predictor of long-term profitability, especially as resource scarcity and environmental risks become more significant.

4. Puriwat, Wilert & Tripopsakul, Suchart. (2022).

Modern consumers are increasingly concerned with the environmental impact of their purchases. Companies with strong environmental practices are seen as more attractive by eco-conscious consumers. A high Environmental Score reflects a company's commitment to offering products and services that align with consumer values related to sustainability. Companies that prioritize environmental sustainability can build strong, lasting relationships with their customers. A high Environmental Score can increase brand reputation and loyalty, especially as environmental stewardship becomes a key decision-making factor for consumers.

5. **Louis T.W. Cheng, Shu Kam Lee, Sung Ko Li, Chun Kei Tsang (2023)**: Companies with high Environmental Scores often adopt energy-efficient technologies, reducing their reliance on fossil fuels and decreasing operating costs. Energy-efficient practices, like using renewable energy or optimizing supply chain logistics, can lower overall expenses, making the company more competitive.Effective waste management, recycling initiatives, and embracing a circular economy (where products are designed for reuse) reduce costs and resource consumption. A strong Environmental Score reflects a company's commitment to reducing waste and improving resource efficiency.

6. **Yiqu Yang, Lingkang Wang, Dongping Yang (2024):** Companies with a high Environmental Score often have policies that prioritize sourcing materials sustainably, ensuring that raw materials are responsibly obtained and have minimal environmental impact. This is crucial for reducing supply chain risks related to resource depletion or environmental degradation. Businesses that promote environmental standards across their supply chains not only improve their own sustainability but also encourage better practices among suppliers, creating a broader impact across industries.

7. **Huang, Bei & Qiu, Xingyu. (2023):** Many employees, particularly younger generations, are increasingly prioritizing sustainability when choosing employers. Companies that demonstrate

strong environmental practices through a good Environmental Score can attract top talent who are passionate about working for eco-friendly organizations. Companies committed to environmental sustainability often have higher levels of employee satisfaction and engagement. Employees who feel their work contributes to positive environmental change are often more motivated and productive.

8. **Yanjun Chang, Shuai Wang (2024)**

Companies with a strong Environmental Score are often at the forefront of innovation in sustainable technologies, products, and processes. This can provide a competitive edge in a rapidly evolving market where green technologies and sustainable practices are becoming more in demand. A commitment to the environment can lead to new market opportunities. For example, companies focused on clean energy, sustainable agriculture, or electric vehicles are poised for growth as demand for these sectors increases globally.

9. **Ho, L., Nguyen, V.H. and Dang, T.L. (2024):** A company’s efforts to minimize environmental harm can contribute to broader social good, particularly in underserved communities that are often the most impacted by environmental degradation (e.g., pollution or deforestation). A strong Environmental Score can demonstrate a company’s commitment to positive social outcomes through environmental responsibility. Companies that take environmental responsibility seriously often foster better relationships with local communities, regulators, and other stakeholders. By minimizing environmental harm, companies demonstrate their commitment to corporate social responsibility, which can improve stakeholder trust.

The **Environmental Score** is a crucial component of the broader ESG framework because it reflects a company's environmental responsibility, commitment to sustainability, and ability to navigate the growing challenges of climate change, resource scarcity, and environmental regulations. With increasing pressure from consumers, investors, and regulators for companies to minimize their environmental impact, a strong Environmental Score can improve risk management, financial performance, brand reputation, and long-term sustainability.

Social Score:

The **Social Score** in an **ESG (Environmental, Social, and Governance) Score** is a critical component that evaluates a company's impact on society and its relationships with stakeholders, including employees, customers, communities, and suppliers. The Social Score focuses on how well a company manages social issues, such as labor practices, diversity and inclusion, human rights, and community engagement. As social concerns become increasingly important for consumers, investors, and regulators, the Social Score plays a significant role in assessing a company's overall sustainability and ethical standing. Here's why the Social Score is so important:

10. **Zhang, T., Zhang, J., & Tu, S. (2024):** A high Social Score indicates that a company treats its employees fairly, providing fair wages, safe working conditions, and respect for labor rights. Companies that foster positive work environments are more likely to attract and retain top talent. Companies with high Social Scores often prioritize employee well-being, offering benefits such as health care, work-life balance, and mental health support. This leads to higher job satisfaction, productivity, and lower turnover rates. Companies that embrace diversity and inclusion in their workforce—by promoting equal opportunities for people of all backgrounds, genders, and ethnicities—can enhance creativity, innovation, and employee morale. High diversity within a company often correlates with better decision-making and problem-solving.

11. Hasan, M.B.,Verma, R., Sharma. D.,Moghalles, S.A.M.,&Hasan,S.A.S.(2024): A good Social Score reflects a company's commitment to providing safe, reliable, and high-quality products and services. Ethical businesses that prioritize consumer safety are more likely to maintain customer trust and loyalty. Consumers are increasingly concerned about how companies impact society. Many now prefer to buy from companies that align with their values, including ethical treatment of workers, responsible sourcing, and commitment to social issues. A strong Social Score helps build a loyal customer base by meeting these expectations. Companies with high Social Scores often exhibit transparency in their operations, fostering trust with consumers. This includes clear communication about their business practices, product sourcing, and how they address consumer concerns.

12. Clément, A., Robinot, É., & Trespeuch, L. (2022).

Companies that invest in local communities through charitable donations, volunteer efforts, and community development programs contribute to social good. A strong Social Score reflects a company's commitment to positive community relationships and supporting the well-being of the areas in which they operate. Companies with high Social Scores often support initiatives like education, healthcare, poverty alleviation, and environmental conservation. This enhances their reputation and strengthens their social license to operate in the communities they serve Businesses that are committed to respecting human rights and ensuring ethical treatment throughout their supply chains demonstrate social responsibility. This includes avoiding child labor, forced labor, and ensuring safe working conditions for all workers.

13. Wee, Kyeong-Woo & Kang, Yun-Sik & Chung, Jay & Lee, Jaehyun. (2020).

Investors are increasingly looking at companies that not only provide financial returns but also contribute positively to society. A high Social Score can attract capital from socially responsible investors (SRI) and funds that prioritize human rights, diversity, and community development. Companies with poor social practices are more vulnerable to reputational risks, employee strikes, consumer boycotts, or legal challenges related to labor disputes or human rights abuses. A strong Social Score signals that a company is managing these risks effectively, which can contribute to greater investor confidence.

14. Handoyo, S.,& Anas,S. (2024): Companies with strong social practices are less likely to be involved in human rights violations, such as discrimination, unsafe labor practices, or violations of worker rights. These legal and reputational risks can be costly, and a high Social Score indicates the company is proactive in avoiding such issues. Companies with high Social Scores often ensure that their supply chains uphold human rights and ethical labor practices. This helps reduce the risk of negative headlines or legal issues arising from poor labor conditions or unethical sourcing in the supply chain.A focus on social responsibility also helps companies comply with various consumer protection laws, such as product safety regulations and anti-fraud measures. Businesses that demonstrate a commitment to social factors are more likely to avoid costly legal challenges.

15. Lee, C. & Luppi, Joley & Simmons, Tyler & Tran, BaoTram & Zhang, Ruoqing. (2023): Companies that demonstrate strong social practices, such as fair wages, inclusive hiring practices, and respect for employee rights, often enjoy better reputations as employers. This attracts top talent, especially among younger generations who prioritize working for companies that align with their value. Companies that promote a positive and inclusive work environment, with a focus on employee well-being, tend to retain employees longer. High employee morale and satisfaction reduce turnover rates and enhance overall productivity.

16. Wang, Y., Cao, J., & Cai, X. (2024): A company's social performance often impacts its social license to operate—its acceptance and support from stakeholders, including employees, consumers, and local communities. Companies with strong Social Scores are more likely to enjoy a positive reputation, fostering goodwill and support from key stakeholders. A high Social Score helps a company respond to crises effectively, whether it involves issues like labor disputes, customer safety incidents, or community concerns. A company that has built a strong reputation for social responsibility is better positioned to manage and recover from challenges.

17. Jagannayaki, Dr.K. & Lakshmi, Dr.T.Vara & V.Rashmitha,. (2024): Companies that focus on social issues help promote more equitable growth, creating opportunities for diverse groups and contributing to the well-being of their broader community. By addressing social challenges such as inequality and access to opportunities, these companies can help create a more sustainable and just society. A company that consistently demonstrates a commitment to social issues builds trust over time. This trust becomes a competitive advantage, as consumers, employees, and investors are more likely to engage with a company they trust to act in the public interest.

The **Social Score** is a vital part of the ESG framework because it reflects how a company interacts with society and its stakeholders. It covers everything from fair labor practices and consumer rights to community engagement and human rights. A high Social Score signals that a company is committed to making a positive impact on society, addressing social risks, and fostering a supportive and inclusive work environment. As social issues continue to gain importance for consumers, employees, and investors, the Social Score has become a key factor in determining a company's long-term success and sustainability.

Governance Score

The **Governance Score** in an **ESG (Environmental, Social, and Governance) Score** is a crucial element that assesses how well a company is managed, including the quality of its leadership, board practices, business ethics, and transparency. Governance refers to the systems, processes, and practices used to direct and control a company, ensuring accountability, fairness, and transparency in all its dealings. The importance of the Governance Score lies in its ability to highlight the ethical standards, operational effectiveness, and long-term sustainability of a company. Below are the key reasons why the Governance Score is vital:

18. Ali, Atik. (2023): Strong governance ensures that a company has capable leaders who are focused on long-term value creation rather than short-term gains. Well-managed companies are more likely to navigate market challenges effectively and capitalize on opportunities. A solid Governance Score reflects strong accountability mechanisms. This means that the board and management are answerable to shareholders and stakeholders for their actions, ensuring that the company's actions align with its stated mission and ethical standards.

19. Zhang, Yuqing. (2024): Good governance involves establishing systems for identifying, managing, and mitigating various risks, including financial, legal, operational, and reputational risks. Companies with strong governance frameworks are better at forecasting potential risks and taking proactive measures to address them. Strong governance practices are directly linked to financial transparency and accurate reporting. This includes clear, truthful financial statements, independent audits, and disclosure of any potential conflicts of interest. Transparent financial practices build trust with investors, regulators, and other stakeholders.

20. Nguyen, Quynh Anh & Kieu, Trang & Thuy, Ngan & Tam, Nguyen. (2024): Governance is closely tied to the ethical practices of a company. A strong Governance Score indicates that the company is committed to ethical decision-making, including anti-corruption measures, fair competition, and responsible business practices. Poor governance can lead to ethical breaches, such as corruption, insider trading, or financial misconduct, which can severely damage a company's reputation and financial standing. A high Governance Score minimizes the risk of such scandals by enforcing ethical business conduct at all levels of the organization.

21. Setiani, Eko & Novitasari, Budi. (2024): Strong governance practices involve ensuring that the board of directors is diverse, both in terms of gender and experience. A diverse board brings different perspectives and improves decision-making. Effective governance ensures that the board includes independent directors who can challenge management decisions and provide objective oversight. Independent boards reduce the risk of conflicts of interest and ensure that decisions are made in the best interest of all stakeholders.

22. Peliu, SA. (2024): A key aspect of governance is ensuring that a company complies with all applicable laws and regulations, from financial reporting to labor practices and environmental standards. Companies with strong governance are better positioned to avoid legal issues, fines, and regulatory penalties. Good governance can help a company proactively identify legal risks and put measures in place to mitigate them. This can include everything from complying with local and international regulations to avoiding potential lawsuits related to unethical business practices.

23. Umakanta Gartia, Ajaya Kumar Panda, Apoorva Hegde, Swagatika Nanda, (2024): The **Governance Score** is vital because it provides insight into a company's leadership, ethical standards, transparency, and ability to manage risks and opportunities. It helps investors assess the quality of a company's management and its commitment to ethical, legal, and sustainable practices. A strong Governance Score reduces risks, builds trust with stakeholders, enhances reputation, and improves the company's ability to adapt to challenges. Companies with robust governance frameworks are better positioned for long-term success, ensuring they not only comply with regulations but also maintain ethical standards that benefit both the business and society as a whole.

Aim:

To understand ESG Score under Indian conditions.

Objectives:

1. To analyze correlation coefficients and regression coefficients between environmental score, social score, governance score and ESG Score of Indian Companies.

2. To determine the most important component amongst environmental score, social score and governance score with respect to ESG Score under Indian conditions using predictor's analysis.

3. To estimate the path diagram of Environmental Score, Social Score and Governance Score with respect to ESG Score of Indian Companies.

Data Collection:

Sample Size:

Yamane's Formula: $N/1+Ne^2$

N= 26,63,016

Sample Size = 26,63,016/1+26,63,016*0.0025 = 399.91 ≈ 400

Data Analysis:

Table No: 1

Reliability Statistics	
Cronbach's Alpha	N of Items
.798	4

Correlation: Table No: 2

Null Hypothesis: There is no relationship between Environment Score, Social Score, Governance Score and ESG Score

Alternate Hypothesis: There is a relationship between Environment Score, Social Score, Governance Score and ESG Score

Correlations

		Environmental Score	Social Score	Governance Score	ESGSCORE
Environmental Score	Pearson Correlation	1	.497**	.373**	.904**
	Sig. (2-tailed)		.000	.000	.000
	N	400	400	400	400
Social Score	Pearson Correlation	.497**	1	.114	.659**
	Sig. (2-tailed)	.000		.152	.000
	N	400	159	159	159
Governance Score	Pearson Correlation	.373**	.114	1	.631**
	Sig. (2-tailed)	.000	.152		.000
	N	400	159	159	159
ESGSCORE	Pearson Correlation	.904**	.659**	.631**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	400	159	159	159

**. Correlation is significant at the 0.01 level (2-tailed).

Regression Analysis: Table No: 3

Null Hypothesis: There is no significant linear relationship between Environmental Score, Social Score, Governance Score and ESG Score

Alternate Hypothesis: There is a significant linear relationship between Environmental Score, Social Score, Governance Score and ESG Score

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Environmental, Societal, Governance[b]		Enter
a. Dependent Variable: ESGSCORE			
b. All requested variables entered.			

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.996[a]	0.991	0.991	0.514
a. Predictors: (Constant), Governance, Societal, Environmental				

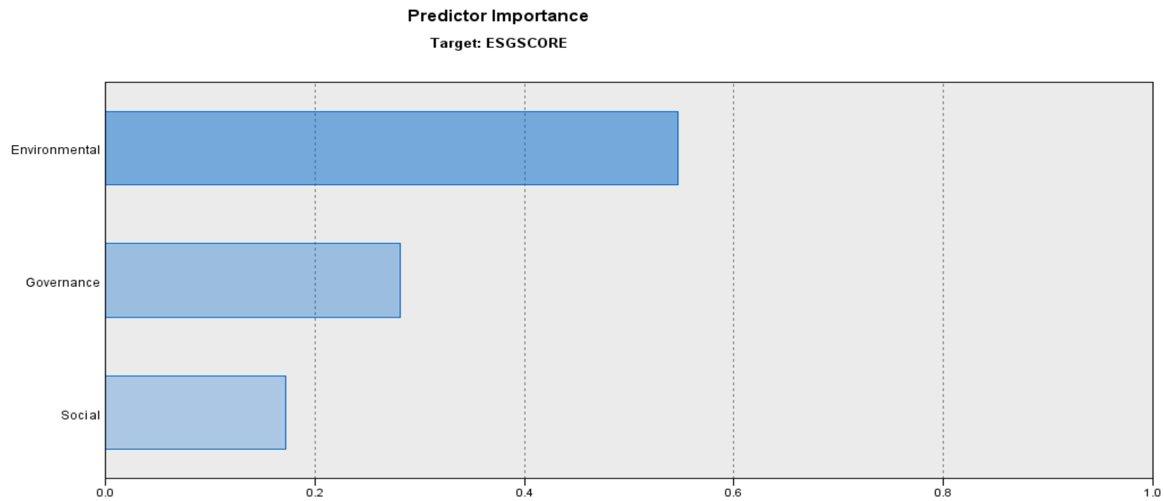
ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4738.37	3	1579.46	15394.34	.000[b]
	Residual	40.645	396	0.1026		
	Total	4779.02	399			
a. Dependent Variable: ESGSCORE						
b. Predictors: (Constant), Governance, Societal, Environmental						

Coefficients[a]

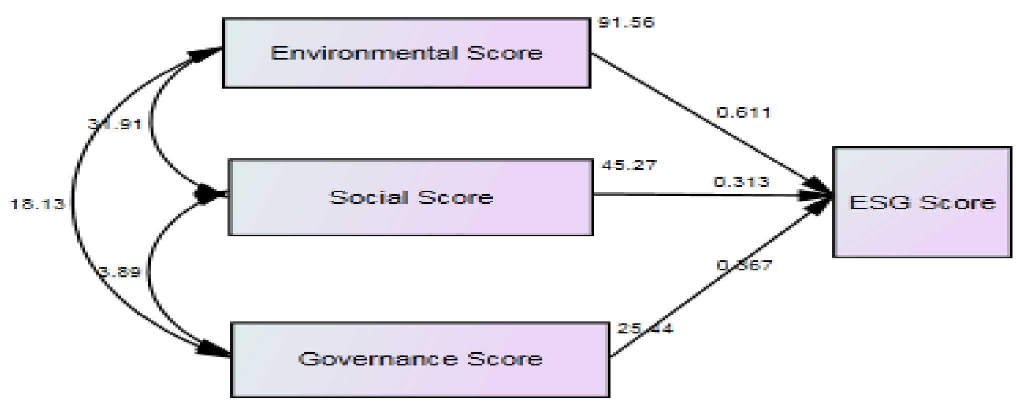
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.241	0.632		-0.382	0.703
	Environmental Score	0.353	0.005	0.611	66.393	0
	Social Score	0.256	0.007	0.313	36.435	0
	Governance Score	0.397	0.009	0.367	45.667	0
a. Dependent Variable: ESGSCORE						

Predictor's Analysis



Nodes	Importance
Social_transformed	0.1718
Governance_transformed	0.2818
Environmental_transformed	0.5464

Path Diagram:



Findings and Conclusions:

1. The correlation coefficients between environmental score, social score, governance score and ESG Score of Indian Companies are positive and above 0.5.

2. The correlation coefficient values indicate that the highly positive correlated factor is Environmental Score followed by Social Factor and Governance Score with values of 0.904, 0.659 and 0.631.

3. The regression coefficient value is 0.996 which indicates that the Environmental Score, Social Score and Governance Score are highly contributing towards ESG Score under Indian conditions.

4. As per Predictor's Analysis, amongst the independent variables, Environmental Score is the most important factor followed by governance factor and social factor. This indicates that the environment is very much congenial to carry out the business operations. The factors needed for carrying out business are available easily as compared to other factors.

5. The path estimate shows that the Environmental Score has highest standardized beta value which is more than governance score followed by Social Score with respect to ESG Score of Indian Companies.

References:

Abhishek Parikh, Divya Kumari, Maria Johann, The Impact of environmental, social and governance score on shareholder wealth: A new dimension in investment philosophy, cleaner and Responsible Consumption, Volume 8, 2023, 100101, ISSN 2666-7843, https://doi.org10.1016/j.clrc.2023.100101.(https://www.sciencedirect.com/science/article/pii/S2666784323000025)

Ali, Atik. (2023). Exploring the Organizational Impact of ESG Leadership in Strategic Human Resource Management (SHRM).

Bellavite Pellegrini, Carlo & Caruso, Raul & Mehmeti, Niketa. (2019). The impact of ESG Scores on Cost of Equity and Firm's profitability, 38-40. 10.22495/ncpr_9.

Cao, Yuxiao. (2023). ESG, Brand Trust and Brand Loyalty. Communications in Humanities Research. 22. 183-189. 10.54254/2753-7064/22/20231704.

Chengming Li, Wei Tang, Feiyan Liang, Zeyu Wang,The impact of climate change on corporate ESG performance: The role of resource misallocation in enterprises,Journal of Cleaner Production, Volume 445,2024, 141263,ISSN 0959-6526, https://doi.org/10.1016/j.jclepro.2024.141263. (https://www.sciencedirect.com/science/article/pii/S0959652624007108)

Clement, Alexnadre, Robinot,E, & Trespeuch, L (2022). Improving ESG Score with Sustainability Concepts. Sustainability 14, no.20: 13154. https://doi.org/10.3390/sy142013154.

Dalit Gafni, Rimona Palas, Ido Baum, Dov Solomon, ESG regulation and Financial reporting quality, Friends or Foes?, Finance Research Letters, Volume 61, 2024, ISSN 1544-6123, https://doi.org/10.1016/j.frl.2024.105017. (https://www.sciencedirect.com/science/article/pii/S1544612324000473).

Deb, R. Behra, A.,& Dusmanta, K. (2024). ESG Scores and Its Impact on Firm Performance: Study from Nifty 100 Firms.IIM Kozhikade Society & Management Review, 0(0). https://doi.org/10.1177/22779752241287600

Handoyo, S.,& Anas,S.(2024). The effect of environmental, social, and governance (ESG) on firm performance: the moderating role of country regulatory quality and government effectiveness in ASEAN. Cogent Business & Management, 11(1). https://doi.org/10.1080/23311975.2024.2371071

Hasan, M.B.,Verma, R., Sharma, D.,Moghalles, S.A.M., & Hasan, S.A.S.(2024). The impact of environmental, social and governance (ESG) Practices on customer behavior towards the brand in light of digital transformation: perceptions of university students. *Cogent Business & Management*, 11(1). https://doi.org/10.1080.23311975.2024.2371063

Ho, L., Nguyen, V.H. and Dang, T.L. (2024), "ESG and firm performance: do stakeholder engagement, financial constraints and religiosity matter?", *Journal of Asian Business and Economic Studies*, Vol. 31 No. 4, pp. 263-276. https://doi.org/10.1108/JABES-08-2023-0306

Hua Tang, Langyu Xiong, Ru Peng,The mediating role of investor confidence on ESG performance and firm value: Evidence from Chinese listed firms,Finance Research Letters, Volume 61, 2024, 104988,ISSN 1544-6123, https://doi.org/10.1016/j.frl.2024.104988. (https://www.sciencedirect.com/science/article/pii/S1544612324000187)

Huang, Bei & Qiu, Xingyu. (2023). The Impact of ESG Ratings on Employee Performance in Companies. Academic Journal of Management and Social Sciences. 3. 89-92. 10.54097/ajmss.v3i2.10255.

Jagannayaki, Dr.K. & Lakshmi, Dr.T.Vara & V.Rashmitha,. (2024). Impact of ESG Factors on Long-Term Sustainability-An Empirical Analysis. International Research Journal on Advanced Engineering and Management (IRJAEM). 2. 1596-1599. 10.47392/IRJAEM.2024.0219.

Kumar, S. (2023). A review esg performance as a measure of stakeholders theory. Academy of Marketing Studies Journal, 27(S3), 1-18.

Lee, C. & Luppi, Joley & Simmons, Tyler & Tran, BaoTram & Zhang, Ruoqing. (2023). Examining the Impacts of ESG on Employee Retention: A Study of Generational Differences. J. of Business and Management. 29. 1-22. 10.1504/JBM.2023.141301.

Louis T.W. Cheng, Shu Kam Lee, Sung Ko Li, Chun Kei Tsang, Understanding resource deployment efficiency for ESG and financial performance: A DEA approach,Research in International Business and Finance,Volume 65, 2023, 101941, ISSN 0275-5319, https://doi.org/10.1016/j.ribaf.2023.101941. (https://www.sciencedirect.com/science/article/pii/S0275531923000673)

Nguyen, Quynh Anh & Kieu, Trang & Thuy, Ngan & Tam, Nguyen. (2024). ESG PRACTICES AND BUSINESS ETHICS.

Peliu, SA. Exploring the impact of ESG factors on corporate risk: empirical evidence for New York Stock Exchange listed companies. *Futur Bus J* **10**, 92 (2024). https://doi.org/10.1186/s43093-024-00378-6

Puriwat, Wilert & Tripopsakul, Suchart. (2022). Unveiling the Power of ESG: How it Shapes Brand Image and Fuels Purchase Intentions - An Empirical Exploration. HighTech and Innovation Journal. 3. 472-482. 10.28991/HIJ-2022-03-04-07.

Qiqi, Wang & Zhaozhen, Song & Yingyue, Kang. (2024). ESG Performance and Competitive Advantage Construction for the Development of Enterprise Transformation – A Case Study of Sany Heavy Industry Co.Ltd.. International Business Research. 17.101-101. 10.5539/ibr.v17n3p101.

Seker, Yasin & Sengur, Evren. (2021). The Impact of Environmental, Social, and Governance (ESG) Performance on Financial Reporting Quality: International Evidence. Ekonomika.100.190-212.10.15388/Ekon.2021.100.2.9

Setiani, Eko & Novitasari, Budi. (2024). Exploring the Impact of Board Attributes on ESG Scores of Indonesian Companies. Nominal Barometer Riset Akuntansi dan Manajemen. 13. 131-143. 10.21831/nominal.v13i1.72362.

Simona Galletta, John W. Goodell, Sebastiano MazzA, Andrea Paltrinieri, Bank Reputation and Operational risk: The Impact of ESG, Finance Research Letters, Volume 51, 2023, 103494, ISSN 1544-6123, https://doi.org/10.1016/j.frl.2022.103494, (https://www.sciencedirect.com/science/article/pii/S1544612322006705)

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, 100076, ISSN 2666-7916, https://doi.org/10.1016/j.clpl.2024.100076. (https://www.sciencedirect.com/science/article/pii/S2666791624000228)

Wang, Y., Cao, J., & Cai, X. (2024). The impact of environmental, social and governance performance on brand value: The role of the digitalisation level. *South African Journal of Business Management*, *55*(1), a4448, https://doi.org/10.4102/sajbm.v55i1.4448

Wee, Kyeong-Woo & Kang, Yun-Sik & Chung, Jay & Lee, Jaehyun. (2020). The Effect of ESG Levels on Fund Performance and Cash Flows. Financial Planning Review. 13. 83-115. 10.36029/FPR.2020.05.13.2.83.

Xiaomin Bao, Muhammad Sadiq, Weiling Tye, Jing Zhang, The impact of environmental, social, and governance (ESG) rating disparities on corporate risk: The mediating role of financing constraints,Journal of Environmental Management,Volume 371,2024,123113,ISSN 0301-4797, https://doi.org/10.1016/j.jenvman.2024.123113.
(https://www.sciencedirect.com/science/article/pii/S0301479724030998)

Yanjun Chang, Shuai Wang, A study on the impact of ESG rating on green technology innovation in enterprises: An empirical study based on informal environmental governance, Journal of Environmental Management, Volume 358, 2024, 120878, ISSN 0301-4797, https://doi.org/10.1016/j.jenvman.2024.120878.
(https://www.sciencedirect.com/science/article/pii/S0301479724008648)

Yiqu Yang, Lingkang Wang, Dongping Yang,The conformity effect of ESG performance in supply chain networks,Finance Research Letters,Volume 65,2024,105555,ISSN 1544-6123, https://doi.org/10.1016/j.frl.2024.105555.
(https://www.sciencedirect.com/science/article/pii/S1544612324005853)

Zhang, T., Zhang, J., & Tu, S. (2024). An Empirical Study on Corporate ESG Behavior and Employee Satisfaction: A Moderating Mediation Model. *Behavioral Sciences*, *14*(4), 274. https://doi.org/10.3390/bs14040274

Zhang, Yuqing. (2024). Impact of ESG Performance on Enterprise Risk. Highlights in Business, Economics and Management. 29. 103-116. 10.54097/2w37vj62.