

ESG INTEGRATION AND FINANCIAL OUTCOMES IN EMERGING MARKETS: A PANEL DATA ANALYSIS

Sushila Telgiri¹, Research Scholar, Goa Business School, Goa University, sushilatelgiri@gmail.com
K.G. Sanakaranarayanan², Professor, Goa Business School, Goa University. kgsmenon@unigoa.ac.in

ABSTRACT

Over the past two decades, the significance of responsible investing has surged, prompting a focus on understanding the interaction between Environmental, Social, and Governance (ESG) factors. This study investigates the relationship between stock returns, investment performance, and ESG considerations as investors increasingly prioritize sustainability in their decision-making processes. By analyzing a sample of NIFTY 50 companies listed on the National Stock Exchange (NSE), this research delves into how ESG factors influence stock returns and financial performance. Employing a comprehensive methodology, this study expands on previous research by incorporating financial performance metrics alongside stock returns. It seeks to shed light on the nuanced dynamics between ESG performance and financial outcomes within the context of NIFTY 50 companies. The FEM regression method was employed to examine how ESG rating affected corporate financial performance and stock returns. Notably, the findings underscore the substantial impact of environmental sustainability on stock returns and financial performance, reinforcing previous

research in this area. Furthermore, the study highlights the significance of individual ESG components, including corporate governance standards and environmental regulations, in shaping investment outcomes. By elucidating the intricate relationship between ESG factors and financial performance, this research contributes valuable insights to the body of knowledge surrounding sustainable investing.

Keywords: ESG factors, financial performance, sustainability, corporate governance, and environmental regulations.

INTRODUCTION

Investors have taken an increasing interest in stocks that make routine ESG disclosures. Investors are now aware of the trade-off between the pursuit of pure value or pure growth stocks and socially conscious investing. Socially conscious investors (SRIs) are drawn to sustainable investing because they feel better about quality stocks that are not impacted by environmental uncertainties. According to OECD (2020), three compelling arguments in favor of ESG investing are enhancing risk

management and achieving returns that are at least as high as normal market returns, considering the impact of climate change on society and the need for responsible behavior, and avoiding short-term return horizons and considering longer-term sustainable outcomes.

In recent decades, the purpose of a firm has been to generate revenue. For those who wanted their investment to pay off and develop, the good and terrible things that transpired in the community surrounding their firm were not a priority. However, not only has time changed for investors but so has the way their investments adapt to changing trends and concerns. A new concept about firms' intangible assets is gaining traction in terms of investment and sustainability. Today, the following three elements play an important role in the investment world: Environment, Society, and Governance (ESG). The ESG is an investment concept that examines not only the return on investment but also the company's social responsibility. Creating a business model that addresses environmental, social, and governance (ESG) factors has become a popular strategy for improving investment financial performance and competitiveness. Investors are attempting to generate long-term value through environmental, social, and management problems and possibilities in their projects. In this sense, ESG considerations have evolved into a core value that enhances firms' reputations, rather than a temporary trend. The incorporation and evaluation of ESG problems in the investment process enable investors to conduct a more comprehensive analysis by assessing potential non-financial risks and opportunities in addition to

traditional financial research. The ESG (Environmental, Social, and Governance) refers to the three major components used to evaluate the ethical and long-term impact of investments. Increasing stakeholder openness by disclosing environmental, social, and governance data helps to mitigate risks and identify opportunities. These characteristics are becoming increasingly important in determining whether or not to invest in a particular business. ESG refers to a variety of business issues that are often overlooked in financial studies but have significant financial repercussions for businesses. Failure to measure ESG exposures can result in significant financial losses. The main principle behind ESG investing is that businesses are more likely to prosper and produce solid returns if they create value for all of their stakeholders' employees, customers, suppliers, and the larger community, including the environment. Rather than just the firm owners, as a result, the ESG analysis investigates how firms serve society and how this affects their current and future success. The ESG examination extends beyond what the company is currently doing. Consideration of future trends is crucial, and it should include disruptive changes that may have a significant impact on a company's future profitability or existence. These three characteristics are considerably more vital today. ESG elements are becoming increasingly crucial in efforts to save humanity from the current outbreak and build company resilience in the future. Another innovative aspect is the examination of individual ESG components, such as corporate governance standards and environmental regulations, and their

distinct influences on financial performance. By highlighting the substantial impact of environmental sustainability on stock returns and financial performance, this research underscores the importance of ESG factors in shaping investment strategies. Overall, the study contributes valuable, context-specific insights into the complex dynamics of sustainable investing in emerging markets, enhancing the existing body of knowledge and providing practical implications for investors and policymakers.

LITERATURE REVIEW

ESG factors have increasingly become relevant in investment decisions as investors prioritize companies with sustainable practices. In this framework, the subject has become a major research area (Kulal et al., 2023), (Sood et al., 2023), and (Suttipun & Yordudom, 2022) empirically examine the performance of the high-ESG (environment, social, and governance) portfolio vis-a-vis the low-ESG portfolio at the Indian stock market before and during the Covid-19 pandemic. Investor activism regarding corporate social responsibility generally improves ESG practices and corporate sales and is profitable for the activist (Barko et al., 2022). ESG news is interpreted differently in different geographical areas (de Vincentiis, 2023). Accordingly, academics have investigated the effect of ESG on both portfolio performance and stock prices (Torre et al., 2020). (Ellili, 2022) analyzed the impacts of environmental, social, and governance (ESG) disclosure and financial reporting quality (FRQ) on

investment efficiency. (Gavrilakis & Floros, 2023) tested how financial performance indicators and combined ESG scores for large-cap stocks impact stock return. Most of the research to date shows that ESG rating scores have a positive impact on stock performance in emerging markets (Said & ElBannan, 2024). Even though ESG is an established area of investigation, prior research has paid inadequate attention to the nexus of ESG scores and stock markets in G7 (Germany, USA, UK, Italy, France, Japan, and Canada) countries (Kevser et al., 2023). In addition, there are many empirical findings that show a positive relationship between ESG practices and financial performance, suggesting that ESG practices can enhance firm value (Lee & Isa, 2023). (Kaiser & Welters, 2019) revealed that when there is a momentum crash, momentum investors can benefit from incorporating ESG to reduce their overall portfolio risk but may sacrifice returns in times of strong momentum rallies. Based on stakeholder and “flight to safety” theory, (Bodhanwala & Bodhanwala, 2023) hypothesized that ESG would have a significant positive effect on stock market performance during the crisis period. Indian firms focus more on governance and social factors than environmental ones (Maji & Lohia, 2023). In contrast, (Lapinskiene et al., 2023) in his research concluded that a higher government score has a favorable effect on environmental pledges and that changes in stock price depend in part on environmental data. According to recent literature empirical studies, it has been seen that the relationship between ESG scores and stock market

performance or financial performance differs from country to country. A negative link exists between ESG disclosure and business risk, implying that companies with higher ESG transparency have lower risk exposure (Naseer et al., 2024). (Atan & Razali, 2016) identify the level of disclosure based on different regulatory requirements on Environmental, Social, and Governance (ESG) information while exploring its effect on the firm's performance comparatively between Malaysia and Denmark. (Miralles-Quirós et al., 2019) revealed that stock market investors value the three ESG pillars differently, also (Samy El-Deeb et al., 2023) revealed that ESG has a significant positive impact on the FV in the EGX and AQ. Companies with strong ESG performance have lower stock price volatility than those with poor ESG performance (Moalla & Dammak, 2023). (Aydoğmuş et al., 2022) found that high ESG performance positively impacts firm value and profitability, with Social and Governance scores being significant, but not Environmental scores, whereas (Kalia & Aggarwal, 2023) reveal that ESG activities positively impact the financial performance of healthcare companies in developed economies, but this relationship is negative or insignificant in developing economies. As a result, previous studies analyzing the relationship between the ESG score and stock return did not confirm an absolute positive effect. The present study differs from previous ESG investment studies by introducing several innovative components. First, it offers new insights into a region that is frequently neglected in ESG literature by concentrating exclusively on emerging

markets, in this case, the NIFTY 50 companies listed on the National Stock Exchange (NSE) in India. The study makes use of the Fixed Effects Model (FEM) regression technique to thoroughly examine the influence of ESG ratings on stock returns as well as business financial performance, providing a more accurate and in-depth comprehension of these connections. Furthermore, by integrating thorough ESG performance measurements, the study surpasses conventional financial metrics and offers a more comprehensive understanding of how sustainability factors impact investment outcomes.

RESEARCH METHODOLOGY

This paper aims to examine the correlation between environmental, social, and governance (ESG) performance and stock returns. This research looks into how stock returns are affected by ESG scores. To achieve this, we have chosen a sample of NIFTY 50 Indian firms that are traded on the NSE and span a range from 2011 to 2023. Secondary data has been used to investigate the relationship between Indian stock return and ESG scores. Consequently, the dataset contains 50 annual data points from 2011 to 2023. Stock prices have been extracted from the NSE website, while ESG scores have been extracted from the Refinitiv database, formerly known as Thomson Reuters. Our analysis is based on a two-step methodology that is panel analysis and descriptive statistics. There are several reasons for choosing this method. First, the NIFTY 50 Indian companies were analyzed in the study, and the panel data analysis gives robust results for the group of

companies. In addition, ESG scores and ROA were included in the analyses as independent variables, while the stock returns were included in the analyses as the dependent variable and market size as the controlled variable.

RESULTS

Table 2 shows descriptive statistics for various ESG and financial metrics. The average ESG score is 51.12, with substantial

variability (standard deviation of 25.73). The Environmental Score has a mean of 46.52 and a high standard deviation, indicating notable differences in environmental performance. The Social Score averages 55.49, while the Governance Score is 48.32, both showing significant variability. Firm size is relatively consistent with a mean of 11.98 (log scale). Log returns average 0.01 with high variability, and ROA averages 9.27, reflecting variability in profitability.

Table 1: Summary of variables

Variable Type	Variable name	Variable Symbol	Definition
Independent Variables	ESG Score	ESG	Comprehensive performance of enterprises in three areas: Environmental, social, and governance.
	Environmental Pillar Score	ENV	The weighted sum of the individual score namely Environmental, Social, and Governance.
	Social Pillar Score	SOC	
Dependent Variables	Governance Pillar Score	GOV	
	Log Return	LR	Net profit/ Average total assets
Control Variables	Return on asset	ROA	
	Market Size	SIZE	The total market value is taken as the natural logarithm.

Table 2: Descriptive Statistics

Variable	Mean	Median	Std. Dev.
ESG Score	51.121	55.834	25.731
Environmental Score	46.515	51.737	46.515
Social Score	55.489	61.184	28.061
Governance Score	48.324	48.819	28.065
Size	11.977	12.016	0.48534
Log Return	0.010263	0.11908	0.73203
ROA	9.2654	6.2427	8.5206

Table 3: Correlations Matrix

		ESG Score	GOV Score	SOC Score	ENV Score	Size	Log Return	ROA
ESG Score	Pearson Correlation	1	.818**	.945**	.900**	.556**	.132**	.078*
	Sig. (2-tailed)	.000	.000	.000	.000	.001	.047	
	N	650	650	650	633	637	650	
GOV Score	Pearson Correlation	.818**	1	.645**	.592**	.382**	.107**	.074
	Sig. (2-tailed)	.000	.000	.000	.000	.007	.058	
	N	650	650	650	633	637	650	
SOC Score	Pearson Correlation	.945**	.645**	1	.847**	.590**	.136**	.115**
	Sig. (2-tailed)	.000	.000	.000	.000	.001	.003	
	N	650	650	650	633	637	650	
ENV Score	Pearson Correlation	.900**	.592**	.847**	1	.499**	.102**	.010
	Sig. (2-tailed)	.000	.000	.000	.000	.010	.808	
	N	650	650	650	633	637	650	
Size	Pearson Correlation	.556**	.382**	.590**	.499**	1	.248**	.090*
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.023	
	N	633	633	633	633	631	633	
Log Return	Pearson Correlation	.132**	.107**	.136**	.102**	.248**	1	.011
	Sig. (2-tailed)	.001	.007	.001	.010	.000	.772	
	N	637	637	637	631	637	637	
ROA	Pearson Correlation	.078*	.074	.115**	.010	.090*	.011	1
	Sig. (2-tailed)	.047	.058	.003	.808	.023	.772	
	N	650	650	650	633	637	650	

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

* . Correlation is significant at the 0.05 level (2-tailed).

Table 3 presents the correlation matrix between the ESG and financial variables. The correlation coefficients show that the ESG score has strong positive correlations with governance, social, and environmental pillar scores, indicating that companies with higher overall ESG scores tend to have higher scores in these individual pillars, while size has moderate positive correlations with the ESG score and its

components, indicating that larger companies tend to have higher ESG scores. Log return has weak positive correlations with ESG score and its components, suggesting a slight tendency for companies with higher ESG scores to have higher log returns, and ROA has weak positive correlations with ESG score and its components, indicating a slight tendency for companies with higher ESG scores to

have higher returns on assets. Overall, these correlations suggest that there is a relationship between ESG performance and other financial variables showing stronger correlations for the individual components of the ESG score.

In Panel A, where the dependent variable is Log Return, Model 1 reveals that the ESG score has a positive and statistically significant effect on Log Return. Specifically, a one-unit increase in the ESG score is associated

with an approximate 1.15% increase in Log Return, indicating that higher ESG scores are beneficial for stock returns. Model 2 shows that the Environmental and Social Pillar Scores significantly enhance Log Return, while the Governance Pillar Score does not have a significant impact. This suggests that the Environmental and Social aspects of ESG are more influential on stock performance than the Governance aspects. Model 3 incorporates both

Table 4: Fixed Effects Regression Results

Model	Independent Variables	Dependent Variables	β (Coefficient)	P-value
1	ESG Score	Log Return	0.0115299	<0.0001***
2	Environmental Pillar Score Social Pillar Score Governance Pillar Score	Log Return	Eni: 0.00590622 Soc: 0.00715398 Gov: -0.00189480	Eni: 0.0416 ** Soc: 0.0163 ** Gov: 0.4391
3	ESG Score Size	Log Return	ESG Score: -0.000434364 Size: 0.902613	ESG Score: 0.8547 Size: <0.0001***
4	Environmental Pillar Score Social Pillar Score Governance Pillar Score Size	Log Return	Eni: 0.00287336 Soc: -0.000395155 Gov: -0.00267742 Size: 0.881956	Eni: 0.3108 Soc: 0.8966 Gov: 0.2589 Size: <0.0001***

Panel B

Model	Independent Variables	Dependent Variables	β (Coefficient)	P-value
1	ESG Score	ROA	-0.0274207	0.0024 ***
2	Environmental Pillar Score Social Pillar Score Governance Pillar Score	ROA	Eni: -0.00633276 Soc: -0.0115506 Gov: -0.0121116	Eni: 0.6544 Soc: 0.4205 Gov: 0.3105
3	ESG Score Size	ROA	ESG Score: -0.0515552 Size: 1.49319	ESG Score: <0.0001*** Size: 0.0086***
4	Environmental Pillar Score Social Pillar Score Governance Pillar Score Size	ROA	Eni: -0.00789835 Soc: -0.0325930 Gov: -0.0135807 Size: 1.58287	Eni: 0.5752 Soc: 0.0310 ** Gov: 0.2493 Size: 0.0054 ***

the ESG Score and Size as independent variables and finds that firm size has a significant positive impact on Log Return, indicating that larger firms tend to have higher returns. However, in this model, the ESG Score is not statistically significant, suggesting that the positive effect of ESG on returns may be overshadowed by firm size. Finally, Model 4 includes the individual ESG pillar scores and firm size. Here, only firm size remains statistically significant, reinforcing the idea that larger firms have better stock returns, while the individual ESG pillar scores do not significantly impact returns when firm size is considered.

In Panel B, where the dependent variable is ROA, Model 1 indicates that the ESG score has a negative and statistically significant effect on ROA. Higher ESG scores are associated with a decrease in ROA, suggesting that while ESG performance may enhance market returns, it could negatively impact accounting performance due to the costs associated with maintaining high ESG standards. In Model 2, none of the individual ESG pillar scores are statistically significant, indicating no substantial effect of these pillars on ROA. Model 3, which includes both ESG Score and Size, finds that both variables significantly impact ROA. The negative coefficient for the ESG Score implies that higher ESG scores are associated with lower ROA, whereas larger firm size is associated with higher ROA, suggesting that while ESG initiatives might incur costs, larger firms manage resources more efficiently. Model 4 further confirms the significant positive impact of firm size on ROA. Additionally, the Social Pillar Score has a statistically significant negative impact on ROA, indicating that higher

social performance might lower ROA, possibly due to the immediate costs of social initiatives that do not yield short-term accounting benefits. The Environmental and Governance scores, however, do not show significant effects on ROA.

Overall, the ESG score has a significant negative relationship with ROA, suggesting that higher ESG scores are associated with lower ROA. The individual environmental and governance pillar scores do not show significant relationships with ROA. The social pillar score shows a significant negative relationship with ROA in Model 4. Firm size consistently shows a significant positive relationship with ROA, indicating that larger firms tend to have higher ROA. The results suggest that ESG performance is valued by investors and enhances market returns, particularly through its Environmental and Social components. However, higher ESG scores might have a mixed impact on accounting performance, potentially due to the costs of implementing ESG practices. Firm size consistently shows a positive impact on both market and accounting performance, highlighting the efficiency and resource management capabilities of larger firms. In this model, the ESG Score is not statistically significant, suggest

DISCUSSION

Using panel data analysis, the relationship between Environmental, Social, and Governance (ESG) factors and stock returns was investigated. This investigation seeks to ascertain the impact of ESG factors on stock return performance using data from Nifty 50 stocks listed on the

NSE over the period from 2011 to 2023. The analysis employs a panel data fixed effects model, with stock return and profitability (measured by Return on Assets, ROA) as the dependent variables. The purpose of the research is to determine whether improved ESG disclosure procedures have an effect on stock returns and to explore the relationship between ESG performance and stock returns. The findings suggest that there is a significant positive relationship between ESG score and stock return. The results show that ESG disclosure positively affects a firm's performance measures. However, measuring ESG sub-components separately showed that some environmental pillar score, social pillar score, and governance pillar score disclosures are negatively associated with ROA and log return. In the fixed effects model, the environmental pillar score and social pillar score have statistically significant positive relationships with log return, while the governance pillar score has a statistically significant negative relationship. None of the independent variables, such as environmental pillar score, social pillar score, and governance pillar score, have statistically significant relationships with ROA. (Waddock & Graves, 1997) suggested that the impact of ESG factors on financial performance can vary, sometimes showing insignificant results for specific measures like ROA. Comparing this study's non-significant results for ROA with similar findings in the literature can help contextualize these results.

CONCLUSION

The study suggests that investors should integrate ESG factors into their decision-

making processes. Companies with strong ESG performance tend to offer better returns and financial stability, making them attractive investment opportunities. This shift towards ESG-centric investment strategies could lead to a more sustainable and ethically conscious market environment. To sum up, the available data indicates that Environmental, Social, and Governance (ESG) variables significantly affect stock returns and investment success. Businesses that prioritize sustainability and moral behavior will probably outperform their competitors. Conversely, companies with low ESG scores run the risk of becoming more vulnerable to risk and may see a decline in their financial performance. The study's findings have significant future implications for investors, companies, and policymakers. Investors should consider integrating ESG factors into their strategies, as high ESG scores are positively linked to stock returns. However, they must also be aware of potential trade-offs, such as the negative impact on accounting returns due to the costs of ESG implementation. For companies, managing ESG initiatives effectively is crucial to balance market and accounting performance, leveraging their size for better integration of sustainable practices. Policymakers could use these insights to craft regulations that support ESG goals while minimizing economic burdens. Future research should broaden its scope to encompass a diverse range of companies and industries, moving beyond the NIFTY 50 index to include various sectors and global markets. This expansion will offer deeper insights into the impact of ESG factors on financial performance across different contexts and help understand how

ESG practices affect companies of varying sizes and industries.

REFERENCES

1. Atan, R., & Razali, A. (2016). Environmental, Social and Governance (ESG) Disclosure and Its Effect on Firm's Performance: A Comparative Study. *International Journal of Economics and Management Journal homepage*, 10(S2). Retrieved from <http://www.econ.upm.edu.my/ijem>
2. Aydoğmuş, M., Gülay, G., & Ergun, K. (2022). Impact of ESG performance on firm value and profitability. *Borsa Istanbul Review*, 22, S119–S127. <https://doi.org/10.1016/j.bir.2022.11.006>
3. Barko, T., Cremers, M., & Renneboog, L. (2022). Shareholder Engagement on Environmental, Social, and Governance Performance. *Journal of Business Ethics*, 180(2), 777–812. <https://doi.org/10.1007/s10551-021-04850-z>
4. Bodhanwala, S., & Bodhanwala, R. (2023). Environmental, social and governance performance: influence on market value in the COVID-19 crisis. *Management Decision*, 61(8), 2442–2466. <https://doi.org/10.1108/MD-08-2022-1084>
5. de Vincentiis, P. (2023). Do international investors care about ESG news? *Qualitative Research in Financial Markets*, 15(4), 572–588. <https://doi.org/10.1108/QRFM-11-2021-0184>
6. Ellili, N. O. D. (2022). Impact of ESG disclosure and financial reporting quality on investment efficiency. *Corporate Governance: The International Journal of Business in Society*, 22(5), 1094–1111. <https://doi.org/10.1108/CG-06-2021-0209>
7. Gavrilakis, N., & Floros, C. (2023). ESG performance, herding behavior, and stock market returns: evidence from Europe. *Operational Research*, 23(1), 3. <https://doi.org/10.1007/s12351-023-00745-1>
8. Kaiser, L., & Welters, J. (2019). Risk-mitigating effect of ESG on momentum portfolios. *The Journal of Risk Finance*, 20(5), 542–555. <https://doi.org/10.1108/JRF-05-2019-0075>
9. Kalia, D., & Aggarwal, D. (2023). Examining impact of ESG score on financial performance of healthcare companies. *Journal of Global Responsibility*, 14(1), 155–176. <https://doi.org/10.1108/JGR-05-2022-0045>
10. Kevser, M., Tunçel, M. B., Gürsoy, S., & Zeren, F. (2023). The impact of environmental, social and governance (ESG) scores on stock market: evidence from G7 countries. *Journal of Global Responsibility*. <https://doi.org/10.1108/JGR-04-2023-0070>
11. Kulal, A., Abhishek N., Dinesh, S., & M.S., D. (2023). Impact of Environmental, Social, and Governance (ESG) Factors on Stock Prices and Investment Performance. *Macro Management & Public Policies*, 5(2), 14–26. <https://doi.org/10.30564/mmpp.v5i2.5659>
12. Lapinskienė, G., Gedvilaitė, D., Liučvaitienė, A., & Peleckis, K. (2023). How Does Environmental Data from ESG Concept Affect Stock Returns: Case of the European Union and US Capital Markets. *Emerging Science Journal*, 7(2), 410–427. <https://doi.org/10.28991/ESJ-2023-07-02-08>
13. Lee, S.-P., & Isa, M. (2023). Environmental, social and governance (ESG) practices and financial performance of Shariah-compliant companies in Malaysia. *Journal of Islamic Accounting and Business Research*, 14(2), 295–314. <https://doi.org/10.1108/JIABR-06-2020-0183>
- Maji, S. G., & Lohia, P. (2023). Environmental, social and governance (ESG)

- performance and firm performance in India. *Society and Business Review*, 18(1), 175–194. <https://doi.org/10.1108/SBR-06-2022-0162>
14. Miralles-Quirós, M. M., Miralles-Quirós, J. L., & Redondo-Hernández, J. (2019). The impact of environmental, social, and governance performance on stock prices: Evidence from the banking industry. *Corporate Social Responsibility and Environmental Management*, 26(6), 1446–1456. <https://doi.org/10.1002/csr.1759>
 15. Moalla, M., & Dammak, S. (2023). Corporate ESG performance as good insurance in times of crisis: Lessons from the US stock market during the COVID-19 pandemic. *Journal of Global Responsibility*, 14(4), 381–402. <https://doi.org/10.1108/JGR-07-2022-0061>
 16. Naseer, M. M., Guo, Y., & Zhu, X. (2024). ESG trade-off with risk and return in Chinese energy companies. *International Journal of Energy Sector Management*, 18(5), 1109–1126. <https://doi.org/10.1108/IJESM-07-2023-0027>
 17. Said, M. T., & ElBannan, M. A. (2024). Do ESG ratings and COVID-19 severity score predict stock behavior and market perception? Evidence from emerging markets. *Review of Accounting and Finance*, 23(2), 222–255. <https://doi.org/10.1108/RAF-03-2023-0083>
 18. Samy El-Deeb, M., Ismail, T. H., & El Banna, A. A. (2023). Does audit quality moderate the impact of environmental, social, and governance disclosure on firm value? Further evidence from Egypt. *Journal of Humanities and Applied Social Sciences*, 5(4), 293–322. <https://doi.org/10.1108/JHASS-11-2022-0155>
 19. Sood, K., Arijit, K., Pathak, P., & Purohit, H. C. (2023). Did ESG portfolio augment investors' wealth during Covid19? Evidence from the Indian stock market. *Sustainability Accounting, Management and Policy Journal*, 14(5), 922–944. <https://doi.org/10.1108/SAMPJ-02-2022-0087>
 20. Suttipun, M., & Yordudom, T. (2022). Impact of environmental, social, and governance disclosures on market reaction: An evidence of Top50 companies listed from Thailand. *Journal of Financial Reporting and Accounting*, 20(3/4), 753–767. <https://doi.org/10.1108/JFRA-12-2020-0377>
 21. Torre, M. La, Mango, F., Cafaro, A., & Leo, S. (2020). Does the ESG index affect stock return? Evidence from the Eurostoxx50. *Sustainability (Switzerland)*, 12(16). <https://doi.org/10.3390/SU12166387>
 22. Waddock, S. A., & Graves, S. B. (1997). The Corporate Social Performance–Financial Performance Link. *Management Journal*, 18(4). <https://about.jstor.org/terms>