International Journal of Research in Finance and Management

P-ISSN: 2617-5754
E-ISSN: 2617-5762
IJRFM 2025; 8(1): 554-558
www.allfinancejournal.com
Received: 10-03-2025
Accepted: 11-04-2025

Swagatika Barik
Ph.D. Scholar, School of Commerce, Gangadhar Meher University, Sambalpur, Odisha, India

Arjuna Kumar Maharana
PhD Scholar, School of Commerce, Gangadhar Meher University, Sambalpur, Odisha, India

Correspondence Author:
Swagatika Barik
Ph.D. Scholar, School of Commerce, Gangadhar Meher University, Sambalpur, Odisha, India

Navigating the Indian Stock Market: The influence of sustainable investment (ESG Factors) on stock prices

Swagatika Barik and Arjuna Kumar Maharana

DOI: https://www.doi.org/10.33545/26175754.2025.v8.i1f.478

Abstract
Present day business organizations, have a plausible responsibility towards their society as a whole, as only pecuniary returns are not enough to erase out the footprints it has already made. ESG investment can leave a trail blazing effect behind in the form of sustainable investment. These ESG factors have enough power to affect the investment and return pattern of both the Corporates and investors, as it has become a trend setter in current market scenario, where dynamism is the only constant & reality. The paper aims to analyze the impact of ESG factors on the Indian stock market. For this study, we have Collected data from the BSE official website and applied regression analysis to analyze the impact. The findings suggest that ESG factors have a strong impact on the stock market prices.

Keyword: ESG, sustainable investment, stock market, economic growth

Introduction

Nifty 50 is a diversified 50 stock index accounting for 15 sectors of the economy. The Nifty In recent years, Environmental, Social, and Governance (ESG) criteria have emerged as crucial Considerations for investors worldwide. In India, where economic growth intersects with environmental challenges, societal diversity, and corporate governance dynamics, the impact of ESG factors on the stock market is increasingly significant. This paper delves into the intricate relationship between ESG metrics and stock market performance in India. By examining how environmental sustainability, social responsibility, and effective governance practices shape investment decisions and market outcomes, we aim to uncover the multifaceted influence of ESG factors on the Indian stock market. However, empirical analysis based on market sensitivity, investment style and industry bias show no direct relationship existing between ESG and stock returns in Norwegian market (Fiskerstrand *et al*., 2019) [5].

Nothing is more powerful than the idea of which the time has come-The above statement of Victor Hugo can be appropriately remembered in the current Context of *Sustainable Investing*. The steady change in investing pattern all over the world and especially in the world of finances is a testament in itself. Socially Responsible Investing or Sustainable Investing or currently known as ESG Investing is getting prominence in the world of finance. Some literature refers Sustainable investment as a way of investment to bring on sustainable development. Even studies show that sustainable portfolios are giving higher average annual returns as well as higher risk adjusted returns on traditional portfolios. Moreover, in the other side a Company’s indifferent attitude towards ESG risk could also invite adverse reputation and repercussions, with the shareholders ultimately facing the financial Consequences. This particular investing represents a promising class of investments Combining financial returns with mitigating environmental challenges, climate change developments (in the backdrop of COP events), achieving SDGs, and creating a positive business impact (Singhania *et al.*, 2023) [16]. It encompasses investing like green investing, socially responsible investing, clean energy investing, investment on technological innovations and investing on the corporate governance structure. Even, in Consequence this investing has been able to make impact through portfolio screening, shareholder engagement and field building which have both direct and indirect impact.

However, sustainable investing, also been criticized by former Black Rock Executive, Tariq Fancy as a "Dangerous placebo" which actually have no impact.

The origins of sustainable investing dates back to a period when divestment strategies were being made against certain assets like sin stocks which have higher short-term returns but in long term may have disastrous Consequences. Around 1960s and 70s, labor unions and civil rights activists started using sustainable investing as a powerful weapon for social change leading to the creation of the first sustainable investing fund in 1971. And in the 1980s, the anti-apartheid movement's Consequences like Consumer boycott, sanctions imposed by several international bodies, oil embargoes highlighted social awareness of sustainable investing. At that time in the western world, sustainable investing has already found its stances in different manner. Whereas in Indian Context, the traces of sustainable investing cum reporting found in erstwhile Indian Companies Act 1956 by way of disclosures in Board's Report of details regarding *Conservation of energy* and ever since the reporting framework has Come a long way with the introduction of Business Responsibility Reporting (BRR), CSR, National Guidelines on Responsible Business Conduct (NGRBC) and the newly introduced Business Responsibility and Sustainability Reporting (BRSR) in 2021 and is mandatory from 2022-2023 is in there in line. Especially when the world is passing through so many crises at environmental level, social level and as such, it became more relevant to discuss investments which have sustainable returns and not just financial returns. Perhaps the alignment of sustainable investing with UN SDGs requires 5 to 7 trillion investment per year until 2030 (IISD, 2020). The rise of sustainable investing even moves investors to give emphasis on ESG stocks as they are increasingly considering not only profitability but also the long-term sustainability and ethical implications of their investment decisions. The integration of sustainability Considerations into investment strategies has significant implications for stock market as Companies those who manage ESG risks & opportunities are become more resilient, have long-term value creation, higher market valuations etc. Supporting this sustainable investment also produces positive social impact by making firms greener and by shifting real investment toward green firms. However, through activities like green washing, Companies pose threat to investors seeking genuine sustainability. Whereas, thematic investing focuses on sectors addressing sustainability challenges such as renewable energy, clean technology and healthcare. ESG criteria serves the foundation of sustainable investing. In this Context, our objective is to explore whether ESG factors are affecting Indian stock market. From our findings, we will recommend policies & strategies on sustainable investment and share insights on its' impact.

Review of Literature

Impact of Sustainable Investment

Corporate governance drives social impact and environmental management to improve the sustainable investment in investors preference (Tseng *et al*. 2019) [16]. Simply sustainable investment namely ESG investment leads sustainability. Sustainable investment refers to investment made on those projects which are made by keeping in mind the benefit of the present generation without hampering the needs of the future one. Especially the motives behind investing sustainably are something beyond financial return, and in the short-run no investor believes, these stocks will generate good return, mainly the private investors are more sceptic. Though the investors believe this sustainable investment significantly reduces financial risk. In todays' Context after so much of evolution and considering the present world scenario it became ESG investing, which has financial returns along with social, environmental, ethical returns or simply returns for every direct & indirect stakeholder. Even studies found that while investing on sustainable assets no investor has to lose their pie of returns from Conventional stocks or there is no Cost of investing sustainably (Sharma *et al*., 2021) [13]. The movement in Conventional stocks and sustainable stocks go simultaneously over time. However, the performance of sustainable investment is heterogeneous worldwide, but there is a promising opportunity for investors those who choose sustainable stocks in place of Conventional stocks in certain regions of the world. Similarly in China, investors pessimistic mood on days with heavy pollution has a negative effect on the stock return of A-Shares while stocks in responsible investment indexes display improved performance over the same period (Gao *et al*., 2020) [6]. Similarly, in short-term the sustainable indices show behavior patterns like the Conventional stocks whereas, in long-term the indices show autonomous behavior giving opportunities for diversification. The rising climate and environmental hazards, not only affect health & property but also the stock return, the investor may earn on his investment. Even, there is a belief that Conventional stocks are performing better that that of sustainable one, which is again checked, as there is clearly no difference between the both. Sustainable stocks don't work in isolation rather there is a flow of information among several set of indices or the markets are integrated with each other. However, when it Comes to ESG ratings earned by a Company, it does not have much favor to do to the stock returns or there is lack of presence of any Connection between ESG and stock returns in Norwegian market (Fiskerstrand *et al*. 2019) [5].

Investing sustainably carries much weightage in darker periods of economy or the society as a whole. During the COVID time, sustainable investment became the safe haven for investors due to reduced financial impacts, benefit of holding for longer horizon and also giving diversification benefits especially when the markets are not so integrated (Mirza *et al*. 2023, Jawa & Zamani, 2022) [10, 3]. Though, the underperformance of sustainable stocks is phase-wise in Comparison to their Conventional Counterpart, and it disappears once the COVID period passed. The underlying reason could be attributed to Company's sustainable policies and good Corporate governance strategies which act as a shield against market crises (Tseng *et al*. 2019) [16]. Sustainable investment represents a paradigm shift in the way capital is being allocated and invested, emphasizing the importance of creating value not only for investors but also for the society and the planet as a whole.

Economic Growth via stock market

As economic growth is an outcome of several factors, likely of everything comes under the roof. At a particular period of time, under certain Conditions ESG indices proves to be one which attract foreign capital from international investors seeking to participate in local capital markets, which led to growth. Stock markets being one of the ways to measure the economic growth, similarly, in case of Ireland, it is found that when the FDI policy are integrated to the principles of sustainable investment, it could be an instrument to channelize growth & development. Several emerging economies like India, China, Brazil, and Turkey are transitioning from Conventional to sustainable investment which actually Cost them less in Comparison to their Conventional Counterpart at least during COVID phase (Jawa & Zamani, 2022) [3]. However, Sustainable Investing is still a niche play, and yet no universal sign of applicability in all emerging markets (IFC Report, 2011).

Research Methodology

Data Collection, tools& techniques used

The purpose of the research is to study the relationship between chosen ESG factors and economic growth through the medium of stock market index. The study is both descriptive and empirical in nature. The data Collected on yearly closing price of BSE 500 index, data on access to clean fuel and technologies for Cooking, GDP growth rate and inflation rate from official and government websites for period from 2000 to 2021. GDP growth rate and CPI have been used as Control variables. Regression analysis is being used to understand how the chosen ESG factors influences the behaviour of S & P BSE 500 index. The study was designed to understand the value of sustainable investment in current financial scenario.

Data Analysis

Model 1

$LnCP_t = \beta_0 + \beta_1\, ACFTC_t + \beta_2\, GDPGR_t + \beta_3\, IR_t + \epsilon_t$

Where,

$LnCP_t$ is the natural log of closing price of S&P BSE 500 Index at time t

ACFTC is access to clean fuels and technologies for Cooking

GDPGR is GDP growth rate

IR is inflation rate measured through CPI.

ϵ_t is the error term

Table 1: Model Summary

Model	R Square	Adjusted R Square	Std. Error of the Estimate	Sig
1	.895	.878	.31625	0.000

Source: Compiled by authors

Table 2: Coefficients a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	5.498	.316		17.395	.000	4.834	6.162		
	ACFTC	.057	.005	.952	12.150	.000	.047	.067	.948	1.054
	GDP gr	.063	.022	.223	2.858	.010	.017	.110	.952	1.050
	CPI	.085	.026	.248	3.240	.005	.030	.140	.996	1.004

A) Dependent Variable: Ln CP

B) Predictors: ACFTC, GDP GR, CPI

Source: Compiled by authors

Table 1 analysed significance value of .000 and this indicates that the regression model being used in this research is significant. As the R square and adjusted R square ratios looks quite good, which shows variables are significant enough to predict the dependent variable. In this model, 89.5 percent of changes in the dependent variable can be explained by the independent variables combinedly. The variable ACFTC has a high standardized Coefficient (β=0.952), indicating a strong positive relationship with LnCP. And the other two variables, Gdp Gr (β=0.223) and cpi (β=0.248) also shows positive relationship with LnCP or the higher the variable goes the more would be the association. Similarly, the unstandardized beta for ACFTC is 0.05 which indicates that for unit increase in ACFTC, closing price of BSE increases by 0.05 unit.

Table 3: Model Summary

Model	R Square	Adjusted R square	Std. Error of the estimate	Sig.
2	.832	.804	.40044	.001

Source: Compiled by authors

Table 4: Coefficient a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
2	(Constant)	5.252	.429		12.252	.000	4.352	6.153		
	CO_2 emissions	2.427	.263	.900	9.235	.000	1.875	2.979	.984	1.017
	GDP. Gr	.010	.027	.037	.380	.708	-.047	.068	.999	1.001
	cpi	.026	.033	.076	.780	.446	-.044	.096	.984	1.016

A) Dependent Variable: LnCP

B) Predictors: CO_2 emission, GDP GR, CPI

Source: Compiled by authors

The table analysed the model, having independent variables of Co_2 emissions, Gdp gr, Cpi where only Co_2 emissions Coefficients (β=0.900) shows strong positive relationship and higher association with Lncp. Gdp gr and Cpi are not as good as predictor in this model.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig.
3	.783[a]	.613	.544	.55990	.001

a. Predictors: (Constant), CPI, GDP GR, Govt. effectiveness
b. Dependent Variable: LnCP
Source: Compiled by authors

This model clearly shows better government effectiveness is associated with higher LnCp. The government effectiveness Coefficient (β=0.823) indicates strong association with Lncp

Table 6: Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
3	(Constant)	8.105	.409		19.820	.000	7.242	8.968		
	Govt. effectiveness	4.068	.793	.823	5.126	.000	2.394	5.742	.884	1.131
	GDP gr	.065	.041	.254	1.587	.131	-.021	.151	.887	1.127
	cpi	.051	.047	.164	1.085	.293	-.048	.151	.996	1.004

A) Dependent Variable: LnCP
B) Predictors: CPI, GDP GR, Govt. Effectiveness
Source: Compiled by authors

This model clearly shows better government effectiveness is associated with higher LnCp. The government effectiveness Coefficient (β=0.823) indicates strong association with Lncp.

Major Findings

Keeping in Consideration the above three models, we found out that the chosen ESG factors play a great role in triggering the movement in the stock market. In the first model, access to clean fuel & technologies for cooking impacts the stock price the most. Whereas the other two variables, GDP growth rate and inflation rate measured through CPI does not influence the stock price movements.
In the second model, CO_2 emissions become the variable which has greater association with the closing price of stocks. And in the third model, Government effectiveness is the factor having higher association with the stock prices
Therefore, in the above study it is found out that the ESG factors have a great bearing on stock prices. ESG investment or sustainable investment can change the stock market dimensions and ultimately the behavioural pattern of the investors.

Practical Implications

Investors Could Consider trends in access to clean fuels and technologies for Cooking as a potential predictor of stock market movements. Economic indicators such as GDP growth and inflation rates also play crucial roles in explaining movements in the stock index. Environmental factors, represented by CO_2 emissions, might influence investor sentiment and hence stock prices. Other economic factors like GDP growth and inflation do not show significant relationships in the second model. Governance quality, as reflected by government effectiveness, can be a critical factor influencing investor Confidence and thereby stock market performance. Economic indicators (GDP growth and inflation) show weaker relationships Compared to governance quality in explaining changes in the stock index.

Conclusion

Stock market returns can fill the pockets of the investors but lacks sustainability. Present day environment & climatic hazards, technological failure, degrading health & rising number of diseases and their Contagion effect have alarmed in high volume. When the rising Co_2 emissions drag the stock prices above, it clearly conveys the message that there is a dire need to redirect the investment in such a way when plummeting CO_2 emission will channelise the movement of the stock prices. However, the other two factors give a ray of hope but the time frame of its' functioning is perplexed and at times in doldrums. Investor and Corporates both have to think and act in tandem to make sustainable investment a success. The ESG investment, poster name for current day sustainable investment has a great bearing in kindling and triggering the stock market performance and its return. Economic factors do not work in isolation, rather other or non-economic factors also are in a position to affect the market movement.

References

1. Ahmed SU, Mahtab H, Hasan I. Institutional investment and corporate social performance: Linkage towards sustainable development. Available from: https://doi.org/10.1002/csr.1298
2. Arias F, Souza FD, Orsato RJ, Oliveira EM, Klotzle MC, Luiz F, *et al*. Can sustainable investments outperform traditional benchmarks? Evidence from global stock markets. 2019;September:1-16. Available from: https://doi.org/10.1002/bse.2397
3. Article O, Zamani K. Sustainable investment versus Conventional investment: A study from Indian stock market during COVID-19. 2022;9(April):63-77. Available from: https://doi.org/10.29121/ijetmr.v9.i4.2022.1137
4. Atif M, Hossain M. Firm sustainable investment: Are female directors greener? 2020;January:1-21. Available from: https://doi.org/10.1002/bse.2588
5. Fiskerstrand SR, Fjeldavli S, Leirvik T, Nenadić O. Sustainable investments in the Norwegian stock market. Journal of Sustainable Finance & Investment. 2019;0(0):1-17. Available from: https://doi.org/10.1080/20430795.2019.1677441
6. Gao Y, Xiong X, Feng X. Responsible investment in

the Chinese stock market. Research in International Business and Finance. 2020;52(March 2019):101173. Available from: https://doi.org/10.1016/j.ribaf.2019.101173

7. Heeb F, Paetzold F, Busch T. Can sustainable investing save the world? Reviewing the mechanisms of investor impact. Available from: https://doi.org/10.1177/1086026620919202
8. Li Z, Wei S, Chunyan L, Aldoseri MMN, Hishan SS. The impact of CSR and green investment on stock return of Chinese export industry. Economic Research-Ekonomska Istraživanja. 2022;35(1):4971-87. https://doi.org/10.1080/1331677X.2021.2019599
9. Marti E, Fuchs M, Desjardine MR, Gond P, Slager R. The impact of sustainable investing: A multidisciplinary review. Available from: https://doi.org/10.1111/joms.12957
10. Mirza N, Abubakr M, Thu T, Nguyen H, Arfaoui N, Oliyide JA. Are sustainable investments interdependent? The international evidence. Economic Modelling. 2023;119(September 2021):106120. Available from: https://doi.org/10.1016/j.eConmod.2022.106120
11. Pástor Ľ, Stambaugh RF, Taylor LA. Sustainable investing in equilibrium, 2021. Available from: https://doi.org/10.1016/j.jfineCo.2020.12.011
12. Pazos RD. Do short- and long-term environmental investments follow the same path? Available from: https://doi.org/10.1002/csr.1437
13. Sharma GD, Talan G, Bansal S, Jain M. Is there a Cost for sustainable investments: Evidence from dynamic conditional correlation. Journal of Sustainable Finance & Investment. 2021;0(0):1-21. Available from: https://doi.org/10.1080/20430795.2021.1874215
14. Šimelytė A, Antanavičienė JG. Foreign direct investment policy as an instrument for sustainable economic growth: A case of Ireland. Journal of Security and Sustainability Issues. 2013;2:1-17. Available from: www.lka.lt/index.php/lt/217049/
15. Sustainable C, Yield I, Financial B. Can sustainable investment yield better financial returns: A Comparative study of ESG indices and MSCI indices. Available from: https://doi.org/10.3390/risks7010015
16. Singhania M, Bhan I, Chadha G. Sustainable investments: A scientometric review and research agenda. Managerial Finance. 2023;50(1):266-94. Available from: https://doi.org/10.1108/mf-04-2023-0238
16. Tseng ML, Tan PA, Jeng SY, Lin CWR, Negash YT, Darsono SNAC. Sustainable investment: Interrelated among Corporate governance, economic performance and market risks using investor preference approach. Sustainability (Switzerland). 2019;11(7):1-15. Available from: https://doi.org/10.3390/su11072108
17. Zenghelis D. A strategy for restoring Confidence and eConomic growth through green investment and innovation, 2012 April.
18. Zhang X, Gui Y. An empirical study on green investment and economic growth in China. 2020;05058:1-4.