



ESG INVESTING: AN EMERGING INVESTMENT STRATEGY IN INDIA

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Abstract

ESG means Environmental, Social and Corporate Governance. It is the subset of non-financial performance indicators which includes how a company prioritizes sustainable, ethical and governance issues such as managing the company's carbon footprint, employees and public relationship and corporate transparency. Our study is based on ESG investment in India discussing various aspects such as ESG investment scenario, ESG funds, ESG score etc. Objectives of our study include- i) to compare performance of Nifty100 ESG and Nifty100. ii) to check the relationship between Nifty100 Stocks return and their ESG scores. We have used index chart and Simple regression analysis in this study. We found that Nifty ESG100 index outperforms Nifty100 index since 2013. After Covid-19 pandemic Nifty ESG index bounds back at a faster rate than the Nifty100 index. And the relationship between ESG score and current yield of Nifty100 stocks is not significant. ESG score and Current yield of Nifty100 stocks are negative correlated each other. There is a huge area for further studies in this topic as it is merging investment strategy adopting in everywhere.

Key words: ESG, ESG factors, ESG score, ESG indices, SRI

1. INTRODUCTION

1.1 Concept of ESG Investing

ESG means Environmental, Social and Corporate Governance. The Financial Times Lexicon defines ESG as "a generic term used in the capital market and used by investors to evaluate corporate behavior and to determine the future financial performance of companies". It is the subset of non-financial performance indicators which includes how a company prioritizes sustainable, ethical and governance issues such as managing the company's carbon footprint, employees and public relationship and corporate transparency.

1.2 ESG's value proposition

Paying ESG concerns helps in value creation for a corporate. It helps to grow top line by efficient use of resources, enhances the public image, and attractiveness to investors. ESG integration leads business to long term sustainability in both environment and the company itself and becomes a good force for society. The research report published on UNPRI's website states that investment in non-ESG companies could

bear up to 28% more risk annually compared with ESG integrated companies in the same industries. The incorporation of ESG factors could lead to lower volatility in a company's shares and mitigate potential risks.

1.3 ESG factors

Environmental, social and governance are the main non-financial factors used to measure the sustainability and ethical impact of a company. They are considered to have material impact on the long term performance, and risk and return of the company. ESG factors are incorporated into investment strategies, compliance and risk mitigation. Now investors are more aware of environmental and social problems and they are the responsible investors who use ESG standards as a framework to screen investment or assess the risk in their investment decision. ESG factors are given in the table below:

Environment	Social	Governance
Climate change	Working conditions	Business ethic
Greenhouse gas emission	Humans rights	Bribery and corruption
Waste and pollution	Employee Diversity	Tax strategy
Water and energy efficiency	Health and safety	Compliance
Deforestation	Child Labour	Executive pay
Biodiversity	Philanthropy	Political lobbying and donation
Resource Depletion	Public relationship	Board diversity and structure

Source: ADEC Innovations

1.4 ESG score

Score range	Description
0 to 25	First Quartile Scores within this range indicates poor relative ESG performance and insufficient degree of transparency in reporting material ESG data publicly.
> 25 to 50	Second Quartile Scores within this range indicates satisfactory relative ESG performance and moderate degree of transparency in reporting material ESG data publicly.
> 50 to 75	Third Quartile Scores within this range indicates good relative ESG performance and above average degree of transparency in reporting material ESG data publicly.
> 75 to 100	Fourth Quartile Score within this range indicates excellent relative ESG performance and high degree of transparency in reporting material ESG data publicly.

Source: Refinitiv

1.5 The ESG Investing Boom

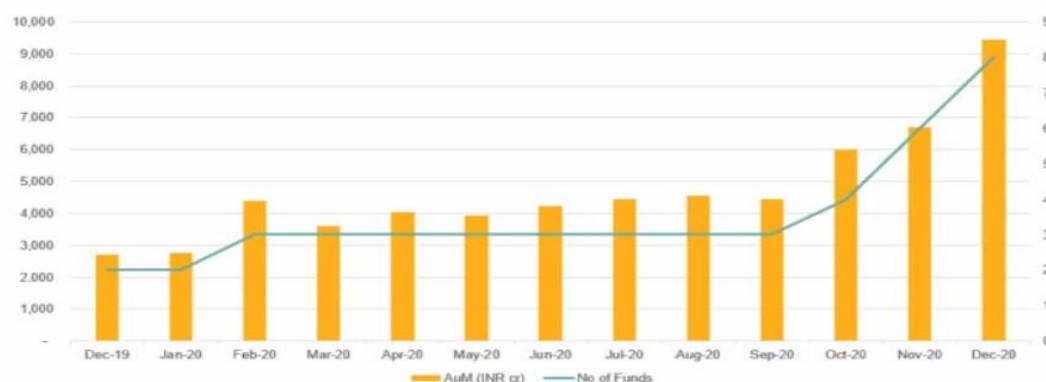
In recent years, there has been a significant increase in ESG investing around the world as individuals and organizations increasingly recognize the interdependence of environment, social and economic issues. This trend has been aided by the covid-19 deadly virus drastically. Because of the market disruption and uncertainty caused by the pandemic in 2020, many Investors, both institutional and retail, are turning to ESG investing for increased resiliency. Currently globally, \$30.7 trillion is invested in sustainable projects, with the funds expected to grow to \$ 50 trillion over the next two decades. A growing number of investors are looking for funds. The reasons why ESG investing is booming in recent time are as follow:

1. Concern for environmental issues
2. Young investors incorporating ESG investing
3. Criticism and pressure from stakeholders and stakeholders capitalism
4. Government initiatives and legal obligations
5. ESG are less risky, better positioned for the long term and better prepared for uncertainty.
6. Central banks are serious about climate change risks
7. Covid-19 pandemic

1.6 ESG scenario of India

In India, ESG investing has gained momentum drastically with the launch of dedicated ESG funds and AMCs signing up for the United Nations Principles for Responsible Investment. The size of ESG-linked assets stands at USD 30 billion and is expected to grow to USD 240 billion in the next 10 years.

Indian Sustainable Fund Landscape



Source: Morningstar

The major ESG funds available in India:

Fund (Regular/Growth option)	Return (%) as on March 12, 2021				
	3 Months	6 Months	1 Year	3 Year	5 Years
Axis ESG Equity	8.53	30.02	48.04		
ICICI Pru ESG	7.45				
Quant ESG Equity	17.04				
Quantum India ESG Equity	13.63	35.97	64.30		
SBI Magnum Equity ESG	11.60	30.52	49.90	13.55	14.83
Mirae Asset ESG Sect Ldrs FOF	9.66				

Source: Morningstar

1.7 ESG Indices in Indian market:

1. Nifty100 ESG index

NIFTY100 ESG Index is designed to measure the performance of companies within NIFTY 100 index, based on Environmental, Social and Governance (ESG) scores. The weight of each constituent is derived from its free float market capitalization and ESG score. The index has been launched in April 01, 2011 and a base value of 1000.

2. Nifty100 enhanced ESG index

Companies in NIFTY100 Enhanced ESG Index should have normalized ESG score of at least 50% to form part of this index. The weight of each constituent is derived from its free float market capitalization and the ESG score. The index has been launched in April 01, 2011 and a base value of 1000.

3. Nifty100 ESG Sector Leaders Index

Nifty100 ESG Sector Leaders Index aims to track the performance of select companies within each sectors of the Nifty 100 which have scored well on management of ESG risk and which do not have involvement in any major controversies.

2. LITERATURE REVIEW

The results of the study conducted by (Cornell, 2020) showed that concerns over environmental and social issues have led the corporate objective such as shareholders' wealth maximization outdated. Information regarding company's operation that impacts the environment should be disclosed by the company and such disclosure should potentially benefit to all stakeholders like shareholders, regulators, governments etc. However, deciding what to disclose and how to disclose is a bit conundrum.

The results of the study conducted by (Angelo Drei, 2019) reflect that ESG investing is the investment feelings of what investor believe in world should like. ESG investment strategies shows in multiple ways means separately present in the world. Financial gain is not anytime the expected result of ESG investment.

The results of the study conducted by (Alessandrini & Jodeau, 2019) showed that ESG setup of 2 passive portfolios and smart beta portfolios can be greatly improved in lack of deducting risk-adjusted returns. In this we also shows reputed intelligent beta approaches could have useful from an ESG conceal over the period. Even with hostile deduction, the specific factors remain in same. We show few deduction in the vulnerability to the specific factor, but it shows to be repay by an increase in the ESG profile of the portfolio. In this paper main focus on ESG profile of passive investment and smart beta strategies could be improved without performance holds.

The results of the study conducted by ((Bennani, et al., 2018) reflect that impact on performance of ESG investment. If we talk about 2010-2013, ESG investing seems low as compare to 2014-2017. In 2014-2017 more beneficial in ESG investing. ESG investment divided into 2 different ways. First, ESG can be an alternative risk assessment model of corporate firms. Second, ESG is an investing style, not a risk model. Mainly showed that how ESG impact on investment flows that can impact asset prices, portfolio Etc.

The result of the study conducted by (Gupta & Agrawal, 2017) showed that there will be two sectors are there government as well as corporate, they both are started taking corporate social responsibility (CSR) as a strategic tool for long term policies and started believe only in profit maximization. CSR is the important function of companies act, 2013. In this paper we show that the relationship between financial performance and size with corporate social disclosure and social spending. Annual report of 64 companies shows that official websites for the fulfillment of the objectives. Multiple regression shows that to explore the result of explicitly that there is a relationship of size and dependent variable.

The result of study organized by (Chelawat & Vardhan, 2016) reflect that business organizations are moving around the short term goal of profit maximization to long term goals include environmental, social and corporate governance. That will be impact on growing ESG factors and can affect their financial returns. If we shows that improvement then ESG performance has lowered risk and increase financial performance. In this study mainly focus on impact of environmental, social and corporate governance (ESG) of companies using panel regression models.

The result of the study organized by (Prasad & Kumar, 2015).showed that now a days Indian companies more focus on triple bottom line like profit, planet and people as compare to single bottom line of earning profit. In this scenario social and environmental objectives are equally important. In corporate houses need to understand cannot sustain for a long period of time in society without fulfilling the urgent needs of the environmental requirements which offers to survive in.so after showing this situation all stake holders including the investors are concerned for company's investment in sustainable development. So in this paper more focus on how to protect the planet from the adverse impact of climate change.

The result of the study organized by (Goyal & Aggarwal, 2014) reflect that ESG (Environment Socially Governance)stocks portfolio well performed the blue chip stocks portfolios and the market portfolio in Indian market, by using risk adjusted measures. When we used absolute rate of return then result will come like ESG stocks portfolio generated higher return than the blue chip and market portfolio. So final conclusion will be if ESG stock portfolio found well then give higher returns as compared to market portfolio.

The result of the study organized by (Sanddhu, Pathak, Pathak, & Swaroop, 2014) indicate that organizations all over the world are being challenged by the problem of corporate social responsibility (CSR). In CSR we show that extent research literature is huge and various. Mainly focus on extant literature in Indian texture has been attempted in paper.

3. RESEARCH METHODOLOGY

3.1 Objective of the Study:-

- To compare performance of Nifty100 ESG and Nifty100.
- To check the relationship between Nifty100 Stocks return and their ESG score.

3.2 Research Design

The descriptive research design was applied to study the relationship between Nifty100 ESG index and Nifty100 index and to compare the performance of these indices.

3.3 Sampling Design

We have used Systematic sampling method in this study. The sample size is Nifty100 stock constituents. The study is based on Secondary data collected from 1st April 2011 to 31st March 2021 for first objective and 2021 ESG score and FY22 Nifty100 stocks' return for second objective. The data are collected from the websites: NSE, Crisil India, and Tickertape.

3.4 Statistical tools

- Simple Linear Regression
- Index chart

3.5 Hypothesis:

Independent Variable- ESG score

Dependent variable – current yields of Nifty100 stocks (1Y Return)

H0: there is no significant relationship between ESG score and current yields of Nifty100 stock (1Y return).

H1: there is a significant relationship between ESG score and current yields of Nifty100 stocks.

4. RESULTS AND DATA INTERPRETATION

Performance comparison of Nifty100 vs Nifty100 ESG index

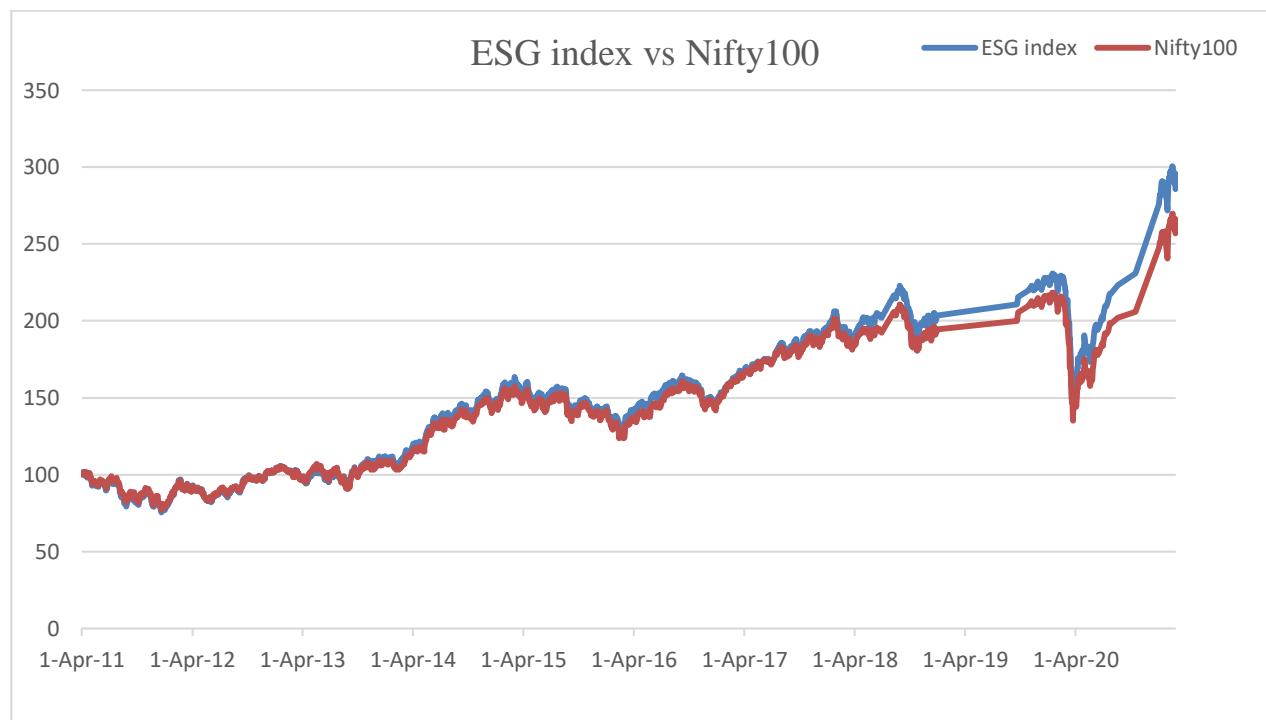


Figure 1: Nifty100 vs Nifty100 ESG for 10 years period

Simple Linear Regression analysis is carried out by using excel and the result of the test is given as follow:

<i>Regression Statistics</i>	
Multiple R	0.1817
R Square	0.0330
Adjusted R Square	0.0201
Standard Error	72.4744
Observations	77.0000

Table 1

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1.0000	13446.2787	13446.2787	2.5600	0.1138
Residual	75.0000	393940.2971	5252.5373		
Total	76.0000	407386.5758			

Table 2: ANOVA

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	157.9082	69.1670	2.2830	0.0253	20.1205	295.6959
ESG score	-1.7811	1.1132	-1.6000	0.1138	-3.9988	0.4365

Table 3

We can establish the simple regression equation based the data given in the table 3 as follow:

$$1Y \text{ Return} = 157.9082 - 1.7811 \text{ ESG score}$$

4.1 Coefficient of Determination

From the results of the regression analysis we find that the value of Adjusted R square is 0.0201 which means the variability in the 1Y Return is explained by ESG score by 2% only. The relationship between 1Y Return and ESG score is not significant as the value of Significant F (0.1138) is greater than the value of α , 0.05. Hence, we can accept the Null hypothesis and reject the Alternative hypothesis. We can conclude that overall model is not significant.

4.2 Hypothesis Testing

It is observed that ESG score has negative relationship with 1Y Return but the relationship is not significant as P value (0.1138) is greater than the value of 0.05, the value of α . It can be concluded that there is no significant relationship between ESG score and current yields of Nifty100 stock (1Y return). Hence, H₀ is accepted.

4.3 The results of the study:

- ✓ By using index chart, we have compared the performance of Nifty ESG100 and Nifty100 indices and we found that Nifty100 ESG index outperforms Nifty100 index since 2013.
 - After Covid-19 pandemic Nifty ESG index bounds back at a faster rate than the Nifty100 index.
- ✓ We have used simple linear regression to find out the relationship between ESG score and current yield of Nifty100 stocks index and we found that the relationship is not significant.
 - ESG score and Current yield of Nifty100 stocks are negative correlated each other.

5. Limitations of the study

The limitations of the study are given as follow:

- The topic is new in Indian Financial markets and there are limit information and data to draw inclusive ideas how investors are using ESG parameters in investing.
- We can conducted regression analysis to find out the relationship between the ESG score and ESG index performance using only one year data as ESG score are available for 2021 only in India.

6. Recommendation

We can recommend that study on this topic has a huge scope and prospect because it is an emerging topic in India and global scenario. Now investors all over the world starts adopting ESG parameters in taking investment decisions and analyze future prospects of the companies they have invested. Our study is not very conclusive due to unavailability of data. We have used only year ESG score in the study because Crisil India started published ESG score in 2021 only. There is no other data sources available for Indian stocks.

7. Conclusion

ESG means Environmental, Social and Corporate Governance. The Financial Times Lexicon defines ESG as “a generic term used in capital market and used by investors to evaluate corporate behavior and to determine the future financial performance of companies”. It is a subset of non-financial performance indicators which includes how a company prioritizes sustainable, ethical and governance issues such managing company’s carbon footprint, employees and public relationship and corporate transparency. As per the research report published on UNPRI’s website states that investment in non ESG companies could bear up to 28% more risk annually compared with ESG integrated companies in the same industries. The incorporation of ESG factors could lead to lower volatility in a company’s shares and mitigating potential risks. We have discussed various areas of EGS investing including ESG metrics, risks indices and performance comparison of ESG indices and Nifty100. We have also elaborated about ESG investing scenario in India and try to find relationship between ESG score and current yield of the index using Simple regression analysis. In this study, we have found that Nifty100 ESG Outperforms the Nifty100 index and ESG index bounds back at a faster rate after the pandemic. The ESG score and Current yield of the Nifty100 stocks are negatively correlated and the relationship is not significant. Our study is not very conclusive due to unavailability of sufficient data and it has colossal scope for further studies as it is new and emerging in the world.

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Appendices

Name	1Y Return	ESG score
Adani Green Energy Ltd	84.45366	62
Adani Total Gas Ltd	412.2074	49
Adani Transmission Ltd	338.2063	61
Ambuja Cements Ltd	45.97109	63
Apollo Hospitals Enterprise Ltd	81.49165	57
Asian Paints Ltd	20.56068	66
Axis Bank Ltd	5.422801	71
Bajaj Auto Ltd	-7.65533	54
Bajaj Finance Ltd	44.06639	66
Bajaj Finserv Ltd	80.44362	65
Berger Paints India Ltd	-7.51319	56
Bharat Electronics Ltd	54.55564	51
Bharat Petroleum Corporation Ltd	-6.51482	59
Britannia Industries Ltd	-0.34428	56
Cholamandalam Investment and Finance Company Ltd	51.52884	63
Cipla Ltd	6.730237	62
Coal India Ltd	15.58063	43
Dabur India Ltd	2.699935	57
Divi's Laboratories Ltd	15.94629	55
DLF Ltd	39.75946	61
Dr Reddy's Laboratories Ltd	-11.0061	63
Eicher Motors Ltd	-7.36349	55
GAIL (India) Ltd	7.214953	60
Godrej Consumer Products Ltd	11.75622	68
Godrej Properties Ltd	30.79216	62
Grasim Industries Ltd	76.19703	63
HCL Technologies Ltd	17.5828	67
HDFC Bank Ltd	3.173312	73
Hero MotoCorp Ltd	-15.3112	62
Hindalco Industries Ltd	103.5757	60
Hindustan Unilever Ltd	-1.78447	63
Hindustan Zinc Ltd	15.11299	55
Housing Development Finance Corporation Ltd	-2.63049	72
ICICI Bank Ltd	45.55817	70
IDBI Bank Ltd	78.86029	56
Indian Oil Corporation Ltd	25.85315	59
Indusind Bank Ltd	-7.74964	72
Info Edge (India) Ltd	-8.54784	63
Infosys Ltd	33.29104	79
ITC Ltd	1.567618	62
JSW Energy Ltd	315.4001	53
JSW Steel Ltd	69.39995	58
Kotak Mahindra Bank Ltd	1.935085	74
L&T Technology Services Ltd	90.62413	60
Larsen & Toubro Infotech Ltd	60.67448	71

Larsen & Toubro Ltd	42.64202	67
Mahindra and Mahindra Ltd	8.283328	68
Marico Ltd	14.71612	69
Maruti Suzuki India Ltd	1.39722	60
MindTree Ltd	134.1586	77
Motherson Sumi Systems Ltd	41.93873	54
Mphasis Ltd	88.96073	59
Muthoot Finance Ltd	21.12182	63
Nestle India Ltd	7.100523	61
NTPC Ltd	39.54214	56
Oil and Natural Gas Corporation Ltd	72.80887	50
Pidilite Industries Ltd	52.09935	59
Power Grid Corporation of India Ltd	46.97643	60
Procter & Gamble Hygiene and Health Care Ltd	41.31144	51
Reliance Industries Ltd	18.02658	64
SBI Cards and Payment Services Ltd	-13.2241	65
Shree Cement Ltd	5.55757	60
Siemens Ltd	40.41935	59
SRF Ltd	114.5344	50
State Bank of India	70.49347	69
Sun Pharmaceutical Industries Ltd	38.74593	44
Tata Consultancy Services Ltd	17.09455	75
Tata Consumer Products Ltd	22.05796	66
Tata Motors Ltd	72.69443	62
Tata Power Company Ltd	191.506	67
Tata Steel Ltd	75.44623	62
Tech Mahindra Ltd	58.60954	75
Torrent Pharmaceuticals Ltd	15.56071	50
UltraTech Cement Ltd	32.72691	61
United Spirits Ltd	43.17784	56
UPL Ltd	34.61637	59
Wipro Ltd	35.7223	75