Does ESG have an impact on stock performance? A panel study of Indian companies

Singh, Sachin and Singh, Bhanu Pratap

Banaras Hindu University, Banaras Hindu University

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Sachin Singh* and Bhanu Pratap Singh†

*Sachin Singh
Deapartment of Economics
Banaras Hindu University
Varanasi -221005 (U.P.) INDIA
&
† Bhanu Pratap Singh
Mahila Mahavidyalaya (MMV)
Banaras Hindu University
Varanasi -221005 (U.P.) INDIA
ORCID ID: orcid.org/0000-0002-1757-9763

Correspondence:
Bhanu Pratap Singh
Economics Section,
Mahila Mahavidyalaya (MMV)
Banaras Hindu University
Varanasi -221005 (U.P.) INDIA
Email: bpsingheco@bhu.ac.in

Abstract

The present study investigates the impact of environmental, social, and governance (ESG) on firms' profitability in the Indian setting on a sample of 23 firms from 2015 to 2020. The bootstrap corrected fixed effects estimation and inference in the dynamic panel method is employed to investigate the relationship. The dynamic panel results show that the relationship between ESG score and firms' profitability is inconclusive in the short run. However, governance conditions affect firms' investment decisions and the nexus between ESG and firm financial performance in the long run. Therefore, institutional reforms are warranted to stabilize property rights and check parent-client politics for the long-run effects of sustainable environmental governance on firms' profitability.

Keywords: ESG scores, Indian firms, firms' profitability, dynamic panel

1. Introduction

Exploiting resources to achieve economic growth is no longer in trend. Investors now use non-financial factors like environment and sustainable governance (ESG) to make investment decisions and analyze companies' financial performance (Khan, 2019). The environment across

the globe is continuously degrading because of overconsumption, population growth, and the rapid development of technology. Global organizations are now actively involved in creating policies and taking initiatives that have positive outcomes for society and the economy, and with minimal (or zero) environmental impact such as the Corporate Net-Zero Standard developed by the SBTi is the world's first framework for setting corporate net-zero targets based on climate science. It contains the guidelines, criteria, and suggestions that businesses will need to set science-based net-zero targets that are consistent with keeping global warming to 1.5°C[1]. As a result of the growing awareness of climate change and its impact, ESG investing is becoming increasingly popular in India and other nations. ESG refers to the sustainable use of water, soil, air, and biomass. Environmental factor disclosure requirements include air pollutant emissions, greenhouse gas emissions, resource uses and impact on bio-diversity. Social factor refers to human rights, inclusive growth and customer value. Social factor disclosure requirement includes employees, communities and consumers. Corporate social responsibility (CSR) activities include practices and policies based on social ethics like health, education and financial inclusion. Governance factors include practices and policies based on corporate governance, business ethics, fraud and anti-corruption measures, public policy etc. Alshehhi et al. (2018) explain the impact of corporate sustainability on financial performance. ESG performance data has grown substantially over the last decade, and investors are integrating ESG performance metrics into investment decision-making for long term financial analysis (Cort, 2020).

ESG indicator is an adequate stock investment strategy and one of the best sustainable and responsible investment (SRI) indices. Fund managers and investors can select the company with better ESG performance to generate higher returns with lower company-specific risk. Three fundamental aspects to socially SRI are screening stocks, an environmental concern of organization and governance. Social investors try to use all three. While each has a different impact and purpose, each of the three helps strengthen the other two's impact. According to Morningstar, about $2.96 trillion has been invested in sustainability-oriented funds globally. Many countries are now concerned about improving their laws and regulations that incorporate the balanced growth of the firm by focusing on ESG performance. According to *Designing Environment, Social, and Governance (ESG) within an Asset Management Framework*, 2021,

[1] *The Net-Zero Standard - Science Based Targets*. (n.d.). Retrieved January 15, 2022, from https://sciencebasedtargets.org/net-zero

organizations are more focused on implementing ESG practices like a policy that directs environmental and safety initiatives, participation and public engagement. Organizations should develop competent asset management infrastructure to implement ESG practices from an asset management perspective. The research and stock analysis based on ESG ratings and a related factor has become an essential aspect of the investment market over the past decade and will get more importance in the coming years. The main factor behind using this indicator is increasing legislative, social concern and environmental consciousness in choosing a sustainable investment. Investors' financial consideration of the ESG characteristics is increasing day by day and implementing strict policies or regulatory obligations to enforce organization government trying to improve their sustainable practices and good governance. There is consistent increasing demand from investors for services or products that will lead society towards sustainability.

ESG investing helps to get maximum financial returns, and the implementation of ESG indicator to screen good and bad ESG ratings in stock investment. Consideration of ESG rating in stock investment has proliferated over the past year. For different investors, ESG ratings can be utilized for various purposes. ESG is used by some investors as a resilient factor to any risk; some use it to do sustainable and responsible investing. According to recent reports, Investors are continuously facing challenges with data availability. Poor quality data and estimation techniques will lead to flawed analysis and weak conclusions. Fau (2021) show that the ESG ratings are an essential factor in stock investment, and it also impacts capital allocation in the market (Latino et al., 2021). Further, sustainable risk management is a crucial factor to achieving good corporate governance that helps in maximizing social, environmental and economic performance (Aziz et al., 2015).

In emerging markets, the quality of institutions is not good because of weak property rights and parent-client politics. Empirical studies suggest good governance is not suitable for poor and middle-income countries in the short run (Singh, 2019; Singh and Pradhan, 2020; Singh, 2021). Therefore, adopting the ESG score for investment decisions in the Indian market poses a significant challenge in the short run. Given above, the current study investigates the relationship between ESG score and firms' profitability in a new institutional framework with recent data and robust estimation techniques.

The following is how the rest of the paper is structured. The following section delves deeper into the subject where the review of literature is reported, and the analytical framework is

discussed in section 3. Data and methodology are explained in section 4. Empirical results are reported in section 5. Finally, the study concludes with section 6.

2. Literature

The present study focuses primarily on two streams of the literature: the impact of ESG factors on profitability and the relation between ESG factors & stock price. We emphasize analyzing the effect of the ESG factor on stock performance and consideration of the ESG factor on stock investment. ESG rating positively impacts the company's valuations as the disclosing will lead to more accountability and transparency in the company's financials. In addition, it points out that more engagement towards sustainability will increase employee engagement and the company's image. However, the financial investors do not consider ESG rating for stock investment as they focus more on the company returns. Sustainable investing involves a broad and growing range of products and asset classes, embracing public equity investments (stocks), fixed income, cash, and alternative investments, such as private equity, real estate and venture capital. Sustainable investors, like conventional investors, seek a competitive financial return on their investment. Environmentally focused investing is the investment practice that integrates environmental factors to create a lens for portfolio analysis, risk management, and ultimately investment. Environmentally focused investing may utilize investment strategies such as exclusion, integration, impact, or engagement methodologies and is a broad term that covers a list of ideologies and practical considerations. Environmentally focused investing is commonly referred to as green investing (Pollard, J.; Sherwood, 2019). However, we are still having trouble measuring and reporting information that properly reflects financial risks and opportunities resulting from environmental or social factors.

In the 1960s and 1970s, the United States and Europe pioneered ESG-based investing philosophy. In Europe, the first Socially responsible investing (SRI) fund was launched in Sweden in the 1960s, whereas US-led socio-political movements started to start socially responsible investments in the 1970s. Globally, as of 2016, there was $22.89 trillion worth of assets professionally managed under the SRI theme. This represents a healthy rise of ~11.9% CAGR since 2014 (IISL, 2018). According to Hong et al. (2012), the more profitable companies, in terms of ESG standards, are subject to softer financial constraints. Further, Pedersen et al.(2020) suggest investors who exclude low-ESG assets from their investment universes may optimally build portfolios with lower ESG scores than investors who allow for such low-ESG assets. The intuition behind this finding is that low-ESG assets are effectively

funding sources, allowing the unconstrained investor to short them to build more significant long positions in high-ESG securities.

Fernández et al. (2020) show that integrated reporting (IR) is the main potential moderating function of ownership concentration, the board size, and gender diversity. Further to this, they provided a glimpse of early evidence on the voluntary adoption of Integrated Reporting (IR) and its impact on the environmental, social, and governance disclosure (ESGD) nexus following the introduction of integrated reporting (IR). Their research is extremely relevant to the investors, government, and firm's managers by integrating ESGD and their ESG information within their financial reports to optimize their financial performance, which may help investors understand and help them make their investment decision easily.ESG is becoming an essential tool for making an investment decision, and soon, it will become one of the prominent factors for investor portfolios in India. Earlier, the financial investors do not consider ESG rating while investing as they focus more on the company financials. According to Refinitiv, a global ESG rating agency and financial market data provider, Indian firms have raised $12.80 billion through green bonds. Today, the total global green asset value is above 40 trillion dollars. However, due to the limited availability of relevant data, comprehensive information, and disclosers, it is tough to quantify and measure ESG ratings. SEBI is not planning to provide ESG ratings due to limited available data and the three types of disclosure – environmental, social and governance. Now investors consider financial and no financial performance to get a balanced scorecard. A balanced scorecard is a strategic management tool that provides relevant disclosure as per financial and non-financial disclosure. It additionally allows the awful business action to prompt the irregularity toward the investors and ESG disclosure, which started the low degree of responsibility with the EGS disclosure.

In India, small investors do not consider ESG rating in decision making. On the other hand, big investors have Portfolio managers and analysts to do ESG analysis before investing. Due to the inaccurate ESG ratings, an investor cannot decide on investment in India. This is because rating agencies consider the ESG disclosure provided by the companies to measure the ESG ratings as per their ESG framework. Therefore, analysis shows the wrong result due to inaccurate ESG ratings of the firms. Still, so many companies are not providing correct ESG disclosure that will lead to the incorrect measurement of ESG rating. Indeed, it will have an impact on the investor's investment decision.

The usage of ESG ratings in education has expanded dramatically over the last two decades and has recently soared. A growing number of economists, management experts, and financiers are using ESG measures. (Hong &Kostovetsky, 2010). Further, Hand &Mcmeeking (2021) provided an analysis that ESG was not a share price resilience factor during the COVID-19 pandemic. ESG was not risking the mitigating factor or protective factor for stocks during the COVID-19 crisis. Though we know that many ESG rating agencies do not completely integrate sustainability principles into the assessment, indeed, they have developed a new ESG measurement framework to analyze ESG rating more accurately(Escrig-Olmedo et al., 2019).

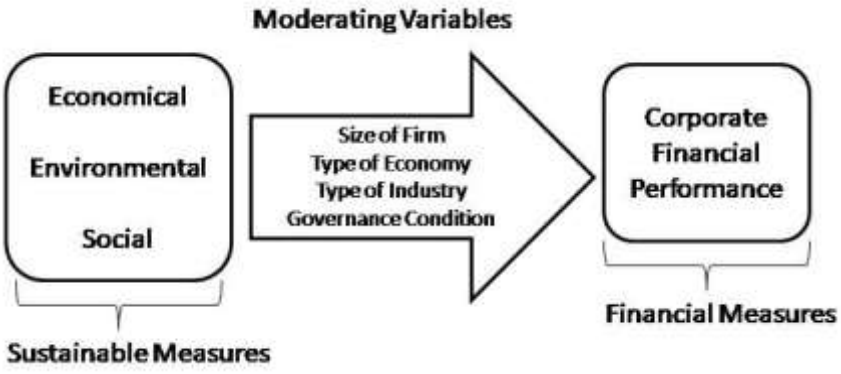
3. Analytical Framework

There are five channels through which ESG positively affects firms' financial performance (Henisz et al., 2019):

1. ESG leads to top-line growth, attracting customers through sustainable products and more robust community and government relationships.
2. It reduces cost through environment pro-energy sources.
3. It helps to get subsidies and incentives from the government.
4. Social credibility attracts talent and uplifts productivity.
5. It optimizes assets through long-term investment into sustainable plants and equipment.

Figure 1 explains sustainable governance measures such as economic, environmental and social affect corporate financial performance (CFP). However, the impact of sustainable variables on CFP depends on moderating variables such as the size of the firm, type of economy, type of industry (Alshehhi et al., 2018) and governance condition (Singh, 2021).

Figure 1: Impact of ESG on Corporate Financial Performance



Source: Alshehhi et al. (2018) and authors' analysis

The firm's size is one of the critical moderating variables because it affects market competition (Martins, 2021). If there is fair competition in the market, ESG practices will help to optimize long-term investment. The economy type is also a critical moderating variable (Saygili, 2021), and the level of economic development affects the ESG and CFP relationship. There are fewer market frictions in high-income countries because of solid institutions, whereas in emerging markets, property rights are weak due to poor institutional quality (Singh, 2021). Therefore, the governance condition has a significant effect on the financial performance of the firms.

4. Data and Methodology

4.1 Data

The current study uses annual balanced panel data on 25 listed Indian firms from 2016-2020 to examine the impact of ESG ratings on firms profitability. For this purpose, we collected ESG ratings of Indian stocks from S&P Global and the financial performance of the firm's data from NSE (National Stock Exchange). Financial performance indicators such as return on capital employed (ROCE), return on equity (ROE), equity per share (EPS), return on asset (ROA), Earnings before interest, taxes, depreciation, and amortization (EBITA), total asset growth (TAGRO), total revenue growth (TRGRO), and total debt to equity ratio (TDEO). Similar variables are used in the past empirical studies on the Indian market (Bodhanwala and Bodhanwala, 2018).

On May 18, 2020, S&P Global launched the ESG Rating for the global investment community. S&P global uses predefined financial materiality factors to determine the ESG score of the company. The ESG score given by S&P Global Ratings is the rating score of a company based on the Corporate Sustainability Assessment (CSA) questionnaire. Further, CSA is categorized into two categories: Participating and Non-participating firms. With company permission, the ESG Evaluation of S&P global uses data from the CSA and analytical implementation of data by Ratings' Analysts to rate the companies. The ESG Research team scores and evaluates individual companies through the data collected each year. To assess the sustainability performance credibly, S&P Global has founded ESG Benchmarking in 2006 as a separate business unit. S&P Global Corporate Sustainability Assessment (CSA) is an annual evaluation of a company's sustainability practices. S&P Global Ratings integrated the CSA into the ESG Evaluation in 2020 to provide world-class ESG ratings. This method is a globally recognized advanced ESG evaluation methodology based on direct discussions between the entity and S&P Global Rating analysts. The ESG Profile score provided by S&P Global Ratings is a

combination of assessment of three Profiles: Environmental (30%), Social (30%), and Governance (40%).

Table 1: Distribution of Firms as per 2 digit Industrial Classification		
NIC Code	Industry	No of firms
33	Basic Metal and Alloy Industries	4
22	Beverages, Tobacco and related Products	1
40	Electricity generation, transmission and distribution	2
35-36	Machinery and Equipment other than Transport equipment	4
31	Petroleum	1
37	Transport Equipment and Parts	1
38	other manufacturing industries	10
	Total	23

Source: Authors' classification

Further, natural log of the ESG ratings and financial variables are taken to seasonally adjust variable and normalize magnitude. The descriptive statistics of the natural logs of the ESG rating and financial variables used in the study are reported in Table 2. The mean value of lnEBITDA, lnEPS, lnESG, lnROA, lnROCE, lnROE, lnTAGRO, lnTDEQ and lnTRGRO are 1.392, 1.378, 1.390, 1.368, 1.393, 1.383, 1.332, 1.392 and 1.318 respectively. The skewness statistics is greater than 0 for all the variables except lnTRGRO, implying non-normality in majority of the series. Kurtosis statistics is greater than 3 for all the variables, implying a thick tail in the data set. The Jarque-Bera is the normality test. The p-value for all the Jarque-Bera test statistics is less than 5 percent. Hence, we cannot accept the null of normality.

Table 2: Descriptive Statistics									
	lnEBITDA	lnEPS	lnESG	lnROA	lnROCE	lnROE	lnTAGRO	lnTDEQ	lnTRGRO
Mean	1.392	1.378	1.390	1.368	1.393	1.383	1.332	1.392	1.318
Median	1.367	1.291	1.313	1.328	1.309	1.337	1.259	1.354	1.227
Maximum	3.559	3.559	3.561	3.563	3.561	3.560	4.464	3.627	3.682
Minimum	0.640	0.406	0.451	0.442	0.535	0.500	-0.053	0.604	-1.754
Std. Dev.	0.651	0.663	0.658	0.675	0.650	0.661	0.694	0.653	0.866
Skewness	1.561	1.586	1.461	1.573	1.549	1.561	1.296	1.517	0.608
Kurtosis	6.007	6.038	5.865	5.856	6.038	5.926	7.005	5.947	4.584
Jarque-Bera	90.054	92.455	80.215	86.478	90.186	87.717	109.033	85.723	19.100
Probability	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sum	160.039	158.484	159.854	157.302	160.219	159.007	153.186	160.047	151.585
Sum Sq. Dev.	48.339	50.128	49.291	51.880	48.144	49.739	54.977	48.623	85.470
Observations	115	115	115	115	115	115	115	115	115

Source: Authors' calculation

Table 3 reports the correlation between the considered variables and their respective probabilities. The result shows that the profitability indicators (lnEBITDA, lnEPS, lnROA, lnROCE, lnROE) are positively and significantly correlated with lnESG, and other determinants of profitability, namely, lnTAGRO, lnTRGRO, lnTDEO respectively. The descriptive statistics and correlation provide evidence that ESG ratings and profitability of firms moves together in a positive direction.

Table 3: Correlation Matrix

Probability	lnEBITDA	lnEPS	lnESG	lnROA	lnROCE	lnROE	lnTAGRO	lnTDEQ	lnTRGRO
lnEBITDA	1								
	-----								
lnEPS	0.953	1							
p-value	0.000	-----							
lnESG	0.983	0.951	1						
p-value	0.000	0.000	-----						
lnROA	0.922	0.982	0.918	1					
p-value	0.000	0.000	0.000	-----					
lnROCE	0.992	0.957	0.986	0.924	1				
p-value	0.000	0.000	0.000	0.000	-----				
lnROE	0.967	0.987	0.957	0.970	0.971	1			
p-value	0.000	0.000	0.000	0.000	0.000	-----			
lnTAGRO	0.790	0.754	0.776	0.721	0.794	0.769	1		
p-value	0.000	0.000	0.000	0.000	0.000	0.000	-----		
lnTDEQ	0.988	0.954	0.981	0.923	0.990	0.964	0.796	1	
p-value	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-----	
lnTRGRO	0.736	0.732	0.729	0.697	0.758	0.756	0.661	0.745	1
p-value	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-----

Source: Authors' calculation

4.2 Methodology

The impact of ESG score on the profitability of firms is estimated using the following equation:

$$lnProf_{it} = \beta_0 + \beta_1 lnESG_{it} + \beta_2 lnTAGRO_{it} + \beta_3 lnTRGRO_{it} + \beta_4 lnTDEO_{it} + \beta_5 D2 + \beta_6 D3 + \beta_7 D4 + \beta_8 D5 + \beta_9 D6 + \beta_{10} D7 + \varepsilon_{it} \quad (1)$$

Where the dependent variable is the natural log of the profitability of firms measured by five different indicators of profitability, namely, return on equity (lnROE), return on capital employed(lnROCE), return on asset (lnROA), equity per share (lnEPS) and earnings before interest, taxes, depreciation, and amortization (lnEBITA). The independent variables are the natural log of environmental, social and governance (lnESG) score, total asset growth

(lnTAGRO), total revenue growth (lnTRGRO), and total debt to equity (lnTDEO). Finally, β'sare the coefficients and$\varepsilon$is the stochastic error term. The dummy variable, namely, D1 to D7 is used to take account of industry effects which takes value 0 for absence of industry effect and takes value 1 for the presence of quality (Table 4).

Table 4: Industry Dummies for Sample Companies

Industry Dummy	Industry Type	No. of firms
D1	Basic Metal and Alloy Industries (Control category)	4
D2	Beverages, Tobacco and related Products	1
D3	Electricity generation, transmission and distribution	2
D4	Machinery and Equipment other than Transport equipment	4
D5	Petroleum	1
D6	Transport Equipment and Parts	1
D7	other manufacturing industries	10
	Total	23

Source: Authors' classification

There is a possibility that the firms' profitability may be associated with any of the independent variables, and profitability in the past period may have a significant effect on the current period. The problem of endogeneity and dynamic effects of lagged dependent variable is taken care of by transforming static model in Eq. (1) to dynamic model in Eq. (2), which is as follows:

$$lnProf_{it} = \beta_0 + \beta_2 lnProf_{it-1} + \beta_3 lnESG_{it} + \beta_4 lnTAGRO_{it} + \beta_5 lnTRGRO_{it} + \beta_6 lnTDEO_{it} + U_{it} \quad (2)$$

In Eq. (2), a lagged dependent variable with cross-sectional fixed effects is included, resulting in dynamic panel bias (Nickell, 1981). Therefore, the model in Eq. (2) could be estimated using the system generalized method of moments (Blundell and Bond, 1998). The system generalized method of moments (GMM) help to estimate dynamic panel with lagged levels and lagged first difference as an instrument for a system of equations. Further, it takes care of the endogeneity and yields robust estimates than OLS. However, GMM cannot be applied due to the short panel (Tran &Vo, 2018; Nguyen & Vo, 2019; Singh et al., 2021). Therefore, the best alternative of the system GMM method is to apply the bootstrap corrected fixed effects estimation and inference in the dynamic panel. The advantage of this method is that it corrects small T bias with a fixed effect estimator (Nickell, 1981). Thus, in the present study extended and simplified version of this method is applied (Everaert and Pozzi, 2007). The model in Eq. (3) estimated

using five different proxies of firms profitability, namely, return on equity (ROE), return on capital employed (ROCE), return on asset (ROA), equity per share (EPS) and earnings before interest, taxes, depreciation, and amortization (EBITA).

5. **Results and Discussion**

5.1 Pooled Regression Results

The impact of ESG ratings on firms' profitability is measured using the relationship in Eq. (1). The dummy variables D1 to D7 are used to capture the industry-specific effects. D1 is taken as a control category in the final model, and dummy variables D2 to D7 are only included in the model in Eq. (1).

Table 5: Pooled OLS Results

	Dependent Variable: Profitability									
Independent variables	lnROE	p-value	lnROCE	p-value	lnROA	p-value	lnEPS	p-value	lnEBITDA	p-value
lnESG	0.306	0.019	0.374	0.000	0.323	0.094	0.413	0.006	0.355	0.000
lnTAGRO	-0.007	0.857	0.012	0.504	-0.033	0.577	-0.015	0.741	0.014	0.520
lnTRGRO	0.071	0.018	0.036	0.006	0.036	0.411	0.047	0.164	-0.002	0.905
lnTDEQ	0.613	0.000	0.564	0.000	0.601	0.004	0.530	0.001	0.629	0.000
C	0.016	0.853	0.037	0.324	0.164	0.195	0.037	0.700	-0.004	0.935
D2	0.007	0.946	-0.020	0.646	-0.319	0.038	0.010	0.932	0.016	0.770
D3	0.008	0.917	-0.017	0.606	-0.085	0.460	-0.009	0.919	0.011	0.794
D4	-0.012	0.837	-0.014	0.580	-0.141	0.094	-0.054	0.396	0.011	0.710
D5	0.057	0.522	0.009	0.812	-0.013	0.919	0.034	0.737	0.009	0.840
D6	0.009	0.924	-0.015	0.715	-0.079	0.574	-0.003	0.978	0.013	0.789
D7	0.008	0.895	-0.016	0.548	-0.088	0.325	-0.010	0.881	0.013	0.681
Adjusted R Square	0.930		0.986		0.851		0.910		0.980	
F-Stat	152.583	0.000	820.744	0.000	66.265	0.000	116.024	0.000	560.441	0.000
DW	2.223		1.345		1.282		1.623		1.363	

Source: Authors' calculation

The pooled OLS regression results are reported in Table 5. The impact of ESG rating on all the profitability indicators of the firms is statistically significant and positive at 1, 5 and 10 percent level of significance. The results are consistent with the past empirical studies like Artiach et al. (2010), Lourenço et al. (2012), Maletic et al. (2015) and Bodhanwala and Bodhanwala, 2018. However, lnTAGRO impact on all the profitability indicators is statistically insignificant (Bodhanwala and Bodhanwala, 2018). The lnTRGRO impact on profitability indicators is mixed. Its impact on profitability indicators such as lnROE and lnROCE is statistically significant and positive, whereas profitability indicators such as lnROA, lnEPS and lnEBITDA are statistically insignificant. The impact of leverage ratio (lnTDEQ) on all the profitability indicators is positive and statistically significant at the levels of 1 and 5 percent, which implies increase in leverage increase perception of risk and positively affects firms

profitability. All the dummy variables are statistically insignificant, implying the absence of industry-specific effects.

5.2 Dynamic Panel Results

Again, the impact of ESG ratings on firms' profitability is investigated by the dynamic panel model in Eq. (2). The same dynamic panel model is applied with the different proxies of a firm's profitability: the return of equity, return on capital employed, return on asset, equity per share and earnings before interest, taxes, depreciation, and amortization.

Table 6: Dynamic Panel Regression Results

	Dependent Variable: Profitability									
Independent variables	lnROE	p-value	lnROCE	p-value	lnROA	p-value	lnEPS	p-value	lnEBITDA	p-value
Profitibility (-1)	0.262	0.095	0.476	0.001	0.641	0.010	0.581	0.000	0.383	0.269
lnESG	-0.120	0.398	0.016	0.780	0.059	0.552	0.125	0.261	-0.176	0.203
lnTAGRO	0.004	0.957	-0.007	0.668	-0.033	0.634	-0.031	0.638	0.021	0.389
lnTRGRO	0.136	0.000	0.052	0.002	0.112	0.000	0.106	0.005	-0.062	0.386
lnTDEQ	-0.110	0.696	0.019	0.888	-0.103	0.689	0.006	0.980	-0.004	0.975
Time Dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	115	115	115	115	115	115	115	115	115	115
No. of firms	23	23	23	23	23	23	23	23	23	23

Source: Authors' calculation

The results of the dynamic panel model are reported in Table 6. The dynamic panels' results show that the impact of the ESG score on all the profitability indicators is statistically insignificant. This implies ESG is not the significant determinant of firm profitability and investment decision in the Indian market. Similar findings are found in the case of Turkish companies (Saygili et al., 2021). However, many empirical studies concluded a positive association between ESG score and profitability based on the pooled OLS results. The present study uses a robust estimation technique with recent data, which raises questions about the stability of parameters in past empirical studies. The impact of total asset growth on all the indicators of firms' profitability is found to be statistically insignificant (Bodhanwala and Bodhanwala, 2018). Further, the impact of revenue growth on all profitability indicators is positive and statistically significant except lnEBITDA (Bodhanwala and Bodhanwala, 2018). Finally, the effect of total debt to equity indicators on all firms' profitability indicators is statistically insignificant.

Empirical findings show that governance condition significantly impacts firms' profitability and ESG- corporate financial performance nexus. Further, implementing environmentally

sustainable governance is not feasible in emerging economies like India due to parent-client politics. Good governance reforms to improve property rights would create disincentives in the emerging markets due to the prevalence of small productive sectors, and people find alternative informal ways to contract with each other (Singh, 2019; Singh and Pradhan, 2020; Singh, 2021).

6. Conclusion

The study investigated the impact of sustainable environmental governance on corporate financial performance in the Indian setting on 23 sample firms from 2015 to 2020. There is an inconsistency in the results obtained from pooled OLS and dynamic panel estimation techniques. The empirical results raise suspicion about the stability of pooled OLS estimates in the current and past empirical studies. The empirical results suggest that the relationship between ESG score and firms' profitability is inconclusive in the short run. Therefore, institutional reforms are warranted to stabilize property rights and check parent-client politics for the long-run effects of sustainable environmental governance on firms' profitability. Further, an effective CSR framework and transparent disclosures would help in the stock performance in the long run. They would help make ESG a vital indicator of in-stock selection for long term investment.

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interests.

DATA AVAILABILITY STATEMENT

The data supporting this study's findings are available from the corresponding author upon reasonable request.

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