

# The Impact of ESG Scores on Financial Performance of Companies: An Analytic Study

Tarashpreet Kaur, Ishdeep Kaur

<sup>1</sup>Tarashpreet Kaur Department of Commerce & Mata Sundri College for Women

<sup>2</sup>Ishdeep Kaur Department of Commerce & Mata Sundri College for Women

\*\*\*

**Abstract** - This study investigates the impact of Environmental, Social, and Governance (ESG) scores on the financial performance of non-financial companies listed on the National Stock Exchange. With the growing importance of sustainable business practices and responsible investing, ESG has become a key area of interest for researchers, investors, and policymakers. However, existing literature provides mixed evidence regarding the relationship between ESG performance and financial outcomes, particularly in emerging economies like India. This study seeks to address this gap by empirically analyzing the ESG–financial performance relationship using panel data methodology.

The analysis is based on a sample of 50 non-financial companies over a five-year period, resulting in 250 firm-year observations. Financial performance is measured using Return on Assets (ROA) and Return on Equity (ROE), while ESG scores are treated as the primary independent variable. The study also incorporates control variables such as firm size, leverage, and firm age to enhance the robustness of the results. Econometric techniques including Pooled Ordinary Least Squares (OLS), Fixed Effects, and Random Effects models are employed. The Hausman test confirms the suitability of the Fixed Effects model, which is used as the final estimator. Additionally, logarithmic transformations and diagnostic tests for heteroskedasticity and autocorrelation are applied to ensure the reliability of the findings.

The results indicate that ESG scores do not have a statistically significant impact on financial performance in the short term. In contrast, firm size shows a negative effect on ROA, while leverage has a strong positive influence on ROE. The findings suggest that ESG should be considered a long-term strategic factor rather than an immediate driver of profitability. Overall, the study highlights the complexity of the ESG–financial performance relationship and underscores the need for further research using extended time horizons and advanced methodologies.

**Key Words:** ESG Scores, Financial Performance, Return on Assets (ROA), Return on Equity (ROE), Panel Data Analysis, Sustainable Development.

## 1. INTRODUCTION

The notion of success in businesses has evolved dramatically with the advent of a new business era. In the past, businesses were deemed successful if they showed strong financial performance. Profitability, revenue growth, and stockholder returns are the primary indicators of a company's operational effectiveness while the criteria mentioned are relevant but they don't give a full picture of the company's overall success and sustainability.

Due of this, the current research will focus on studying the way by which ESG rankings impacts businesses' financial success and growth. By examining specific financial indicators and including relevant control variables, the study seeks to clarify this relationship.

## 2. Concept of ESG and ESG Scores

Environmental, Social, and Governance (ESG) is a general term used for business practices related to sustainability. ESG scores are used to methodically evaluate these aspects. Rating organizations evaluate firm disclosures, reports, and performance measures in order to calculate these scores using a variety of indications and data sources. A rating that represents a company's ESG performance is provided by this scoring algorithm.

Investors can benefit from ESG scores since they help condense large amounts of data into a single indicator. With the use of ESG evaluations, investors can examine businesses and identify which are more ethical and sustainable. Better ESG scores are generally indicate effective risk management for the environment, society, and government.

### 3. Financial Performance and ESG Scores' Relationship

The multidimensional and complex relationship between ESG scores and financial success. For instance, because ESG ranking affect investors investment in a company and reputation of the company and the impact of the company's financial performance.

If all companies use eco-friendly production method than it can be minimise the operational expenses and wastage of resources. And this type of businesses prioritize the health of their customer as well as staff, by this increase customer ID and productivity of the company.

However, by ensuring accountability and transparency in the business's activities, strong governance encourages positive financial outcomes.

If any company start the ESG initiative it could be caused a lot of money a front. So this initiative have negative impact of profitability of companies in short term. That's why knowing the impact of ESG rating of the companies so take the long term period data for the analysis so that sure it will show positive impact.

### 4. Need and Importance of the Study

In the business sector ESG stands more and more important for the stakeholders and people are becoming more interested in this field and find out the how these pillars affect financial performance. Evenly there is wealthiest research that how companies apply ESG standards. And it is the unclear how these standards affect financial performance positive or negative that conclusion should be drawn from this research.

This paper mainly objective is how companies performance affected by e s g scores and finding out how much factors are affecting by these pillars and discuss the contribution towards the firm's financial success.

### 5. Research Problem Overview

The first question arises for this study how much companies financial success is impacted by its environmental social and governance score. So, this study mainly focuses on relationship between ESC scores and two financial indicators ROA and ROE and other variables.

A few control factors will be used in this study because we know that only these factors are not affecting the company's financial performance, other factors also

effect the financial performance, like age size and level of leverage of the firm would likely be considered as the control factors in the study. So basically, are studying is that how is the affect the financial performance and each of the studies variable has a distinct purpose and contribute to the development of the reliable image of this research and the relationship under the investigation.

### 6. Literature Review

(Chilukuri, 2021) titled "ESG and Sustainability Finance: A Critical Review of the Influence of ESG Scores on Firm's Performance" in this research ASD and sustainability finance a critical review of the influence of is this cause on firms performance examine the evolving corporate landscape and highlight the importance of the ethical behaviour risk management, accountability and strategy stakeholder management. In this research roe as a serve dependent variable and EST scores as a represented independent variable. In methodology use the correlation technique for the findings positive correlation between aged score and firm value and showing the strong positive relationship between the social and governance variable and no significant correlation was found between environmental factor and firm value.

Another pertinent study by (Kumar, 2025) examines how sustainability initiatives affect the financial performance of 100 Pakistani publicly traded companies between 2014 and 2023. Return on Equity (ROE), Tobin's Q, and ROA are considered as dependent variables in the analysis. This study employed a method of moment, descriptive analysis, and correlation matrix as sampling techniques. Politicians and company management may embrace sustainable business practices as a result of the findings, which imply that continued financial growth is feasible. However, a significant weakness of this study is that ESG ratings rely on ratings and are not always correct or comprehensive; as a result, the study's conclusions may only apply to publicly traded companies.

The impact of environmental performance and good corporate governance on firm value through corporate social responsibility (CSR) is examined in the study conducted by (Wati, 2021) The regression analysis included a number of variables, such as CSR, environmental performance (EP), good corporate governance (GCG), business size, leverage, and Tobin's Q. Multiple linear regression and sampling were used in the study's methodology. It was discovered that companies with excellent environmental performance have a high regard for social and environmental issues.

Through corporate social responsibility, they demonstrate their commitment to solving the issues, which results in a favorable response from the market.

(Vuppuluri, 2024), examines the connection between the financial performance of firms listed on the Indian National Stock Exchange during a ten-year period, from 2013 to 2023, and their ESG scores. When evaluating the companies' ESG scores, the researcher takes into account a number of accounting metrics, such as return on assets, profit after tax, return on net worth, total stock return, market capitalization, and Tobin's Q. Sampling, ANOVA testing, post hoc testing, variance inflation factor estimation, and panel data regression are some of the methods used. As it happens, the relationship is not really important.

Similarly, (Othman, 2012) used an empirical study including the world's leading firms to examine the connection between corporate financial performance and the adoption of sustainable practices. The impact of sustainable behaviors on the ecosystems, societies, and surroundings of future generations was highlighted in this study. Key variables employed included sales, ROA, profit before taxes, and cash flow. Methodologies included t-tests and regression analysis, as well as targeted population sampling, checklist analysis, and analysis at the national and industry levels. According to the report, businesses that implemented sustainable practices had improved financial results.

However, (Rajesh, 2019), used the ESG score to examine how well businesses performed in terms of sustainability. A analysis of the literature revealed a connection between supply chain performance and sustainability. Human rights scores, management scores, and shareholder scores were among the important criteria that were examined. Absolute, relative, and synthetic degrees of grey incidence analysis were used for data sampling and analysis. The study's conclusions showed that the governance score component of the ESG score was influenced by the shareholder and management scores of the three important factors.

## 7. Research objectives

- To examine the impact of ESG scores on the financial performance of NSE-listed non-financial companies.
- To analyze the relationship between ESG scores and financial indicators such as ROA and ROE.

- To evaluate the effect of firm-specific factors such as firm size, leverage, and firm age on financial performance.
- To compare the suitability of OLS, Fixed Effects, and Random Effects models in panel data analysis.
- To assess the importance of ESG practices in promoting sustainable business performance and long-term financial success.
- To provide policymakers and investors with information and suggestions on how to incorporate ESG considerations into strategic and investment decisions.

## 8. Sources of Data

This research relies exclusively on secondary data obtained from credible and publicly accessible sources. Collection Procedure It is clear that secondary data sources will be the foundation of this study, and their contribution is crucial to the development of a trustworthy analysis system. CRISIL ESG ratings are used to determine the scores for the environment, society, and governance as well as their individual and composite components (environment (E), society (S), and governance (G)). It is important to note that CRISIL is a source that offers defined measurements for governance, social, and environmental concerns that take into account the unique features of the Indian environment. Financial information gathered from different source like BSE, NSE, CRISIL website, Comprehensive Industry Monitoring and Analysis (CMIE) Prowess statistics, annual report.

Company annual reports and well-known financial databases are used to get information about their financial performance. Return on Assets (ROA) and Return on Equity (ROE) are two important measures of performance. The sample is made up of companies that are listed on the National Stock Exchange (NSE), which makes sure that the analysis is consistent and reliable.

## 9. Hypotheses

| H0                                                                                                    | H1                                                                                                |
|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Returns on Assets (ROAs) do not influence by ESG scores that impact companies' financial performance. | Returns on Assets (ROAs) do influence by ESG scores that affect companies' financial performance. |

Returns on Equity (ROEs) do not influence by ESG scores that impact companies' financial performance.

Returns on Equity (ROEs) do influence by ESG scores that affect companies' financial performance.

## 10. Tools and Techniques of Analysis

The methodologies utilized for data analysis consist of Descriptive Statistics, Correlation Analysis, Multiple Regression Analysis, and Trend Analysis.

### • Summary statistics

Important features of the data collection are described using descriptive statistics. Important metrics including the mean, median, standard deviation, and minimum and maximum values are included in these statistics. The distribution of data can be described and any trends or patterns can be found by using such statistical criteria. For instance, the mean of the ESG score offers information on the average performance of businesses with regard to the environment, society, and governance elements, while the standard deviation reveals the degree of dispersion among the values. Before using other statistical techniques, a descriptive analysis must be carried out in order to properly comprehend the data.

### • Correlation analysis

Correlation analysis is a statistical method for figuring out how strongly two or more variables are related to one another. Correlation analysis would be used in this situation to compare exam results with financial performance metrics like ROA and ROE.

A numerical representation of this relationship is the correlation coefficient, which has a range of -1 to +1. The two variables have a negative association when the coefficient values are negative, meaning that when one increases, the other decreases. Conversely, if one variable increases, positive coefficient values show a positive correlation between the two variables. If the correlation value is close to 0, the two variables have very little relationship.

As previously said, the correlation just shows the strength of the relationship between the two variables; it does not establish a causal relationship.

### • Ordinary Least Squares (OLS) Model

A fundamental method for determining the linear relationship between a dependent variable and one or more independent variables is the Ordinary Least Squares (OLS) model. The current study examines how the ESG score affects financial factors like ROA and ROE using the OLS approach. The OLS model's goal is to reduce the squared discrepancies between the observed and predicted values.

#### i. OLS model is expressed as:

$$ROA/ROE = \beta_0 + \beta_1 \text{ ESG} + \beta_2 \text{ SIZE} + \beta_3 \text{ LEVERAGE} + \beta_4 \text{ AGE} + \varepsilon$$

A number of fundamental presumptions underpin the Ordinary Least Squares (OLS) model, including homoscedasticity, linear correlations between variables, error independence, and the absence of multicollinearity among the independent variables. However, because both firm-specific and time factors are present, there are certain challenges with these assumptions when performing studies utilizing panel data. However, the Ordinary Least Squares model is important because it provides a basic grasp of the complex relationship between financial performance metrics and ESG ratings. The Ordinary Least Squares regression analysis's very straightforward and intelligible character is one of its main advantages. Because of this, researchers and analysts can easily understand the results generated by the OLS model. It should be emphasized, nonetheless, that the model's applicability ignores the problem of unobserved heterogeneity, especially when it comes to businesses. To increase the reliability and accuracy of the conclusions produced by OLS, it is prudent to add more sophisticated panel data models, such as Fixed Effects and Random Effects approaches, to this study by employing these models to take individual-specific traits and temporal dynamics into account, researchers can gain a deeper understanding of how ESG components relate to various elements of financial success. Ultimately, this integrated approach provides a more nuanced understanding, which is crucial in today's complex and dynamic business environment.

### Fixed Effects Model (FE)

The FE model employs a number of techniques to quantify time series variation within each business, including first differencing, which takes time series changes into account, and degrading, which includes subtracting the mean value. This enables the model to

calculate the impact of relevant variables, like ESG scores, on the dependent variables (financial performance). As a result, FE regression is one of the best models for examining the impact of ESG on financial performance and may offer objective estimations.

### Random Effects Model (RE)

The RE model is a crucial tool for researching data analysis that varies among businesses or organizational units. The RE model's most notable characteristic is that, in contrast to another kind of model known as the FE model, it is predicated on the idea that each firm's unique characteristics have no bearing on the independent variables being studied. RE model is that able to take both variation within and major advantage of the re model is their efficiency. Re model include more data that's mean RE model probably more informative than FE model.

### Hausman Test

The Hausman test is a very useful statistic that allows the researcher to select between the fixed effects and random effects models, two common estimate approaches. The test entails determining whether the independent variables under consideration are correlated with each observation's individual effects.

In conclusion, using the Hausman test enhances both the process of choosing a model and the validity of the study's findings. It is therefore essential for every researcher.

## ii. Model Specification of Log-Transformed Model

The log-transformed model used in this study can be expressed like this:

$$\ln(\text{ROA/ROE}) = \beta_0 + \beta_1 \ln(\text{ESG}) + \beta_2 \ln(\text{Leverage}) + \beta_3 \ln(\text{Size}) + \beta_4 \ln(\text{Age}) + \varepsilon$$

Here, the dependent variable (ROA or ROE) and the independent variables (ESG score, leverage, firm size, and firm age) are shown in their natural log form. The term  $\beta_0$  is the intercept, while  $\beta_1$  to  $\beta_4$  are the coefficients for each independent variable. The error term  $\varepsilon$  accounts for the impact of unobserved factors.

Using a log-log model allows us to interpret the coefficients as impact measurements, which means each coefficient shows the rate of change in the dependent variable for a 1% change in the independent variable. This approach is especially useful in financial analysis, where relative changes concern more than actual values.

### OLS Estimation of Log Model:

First, we use Ordinary Least Squares (OLS) to estimate the log-transformed model. This helps establish a basic relationship between ESG scores and financial performance. The OLS estimation in logarithmic form provides more reliable results than a linear model, as it minimizes the impact of extreme values and enhances data distribution.

In the log-log model, the estimated coefficients reflect elasticities. For example, if the coefficient for  $\ln(\text{ESG})$  is positive and significant, it means that higher ESG scores lead to better financial performance. Specifically, a one percent increase in the ESG score would result in a  $\beta_1$  percent increase in ROA or ROE, keeping other factors constant.

### Fixed Effects Estimation of Log Model

To address the unobserved heterogeneity across firms, a fixed effects (FE) model will be used to estimate the log-transformed regression model. The FE model uses firm specific time invariant characteristics such as management style, corporate culture or industry effects that have an effect on financial performance (as opposed to using random effects).

Thus, the fixed effects log model provides the researcher with a set of unbiased and accurate estimates of the ESG score-financial performance relationship by eliminating unobserved factors, resulting in the FE log model generally providing stable results compared to the OLS model.

#### • Heteroskedasticity

Heteroskedasticity occurs when the variance of error terms varies across different observations. This scenario breaks one of the fundamental assumptions of classical regression models and may lead to estimates that are not only inefficient but also result in biased standard errors.

The alternative hypothesis suggests heteroskedasticity, while the null hypothesis asserts homoscedasticity, or constant variance. Heteroskedasticity is present if the p-value is less than 0.05. Because enterprises vary in size, risk, and operational scale, heteroskedasticity is a common topic in Environmental, Social, and Governance (ESG) research.

- **Autocorrelation**

It works on correlation of error terms over several time periods, when the track same company data over number of years, then this issue raised in the panel data. By autocorrelation presumptions maybe broken regression analysis. Skewed standard errors arise and faulty hypothesis testing.

Auto correlation is present if the p values less than 0.05. financially measures like Return on Equity (ROE) and Return on Assets (ROA) have a tendency to present over time in ESG research.

- **Robust Standard Errors**

By existing the variance co-variance matrix improve the standard errors in the research.

For the panel data analysis robust standard error are important for variations between organisations and interactions overtime. By this our finding are reliable and improve the coefficient.

This method improve the validity of our research and we use robust standard errors for increasing applicability in both academy and the real world activities

- **Multicollinearity**

When independent variable in regression are closely related topics the another than multicollinearity happens. By this test increase standard errors and making it hard to understand and analysis the impact of each variable

In our research variance inflation factor (VIF) is also called the multicollinearity. If the VIF values over 10 then it shows the significant multicollinearity issue that needs importance.

- **Model Robustness Checks**

We do robustness checks to ensure that our results are reliable and trustworthy. Using various model settings, adding robust standard errors, and examining the outcomes of Ordinary Least Squares (OLS), Fixed Effects (FE), and Random Effects (RE) models are all part of these assessments.

## 11. Limitations of the Methodology

The study we've conducted has been carefully designed, and while it offers valuable insights, there are some important limitations to keep in mind:

1. Dependency on a Single ESG supplier: CRISIL was the only ESG supplier whose data we examined. Even if they have a standardized method for assessing businesses, it's crucial to recognize that each provider may have personal prejudices that could affect the outcomes.
2. Potential Endogeneity: It is possible that the connection between financial performance and ESG characteristics is more nuanced than it first appears. Although we've made an effort to fix this problem, it hasn't been fully remedied, so some caution is necessary.
3. Only 50 companies were included in our investigation. Despite being selected based on specified criteria, this particular group might not accurately reflect the sector as a whole or offer a comprehensive picture for applying our findings more widely.
4. Use of Annual Data: For our analysis, we employed annual data. Although this is common, it makes it more difficult to spot any short-term trends or changes in the financial performance or ESG landscape.
5. Data Gaps and Methodology Changes: Over time, CRISIL may alter how they rank businesses, or there may be gaps in the available data. This may have an impact on our results' long-term comparability.

## 12. Analysis Interpretation

The impact of ESG scores on the financial performance of 50 organizations over a five-year period utilizing 250 observations is thoroughly evaluated in this chapter. Descriptive statistics, correlation matrix analysis, heteroskedasticity test, autocorrelation test, pooled OLS estimation, Hausman specification test, and fixed effects panel regression are the methods used to examine the sample data. The fixed effects approach was the most important method used in this procedure.

Descriptive statistics revealed significant differences in both financial performance and ESG rankings. These differences have been seen, particularly when raw leverage and return on equity (ROE) are taken into account. This indicates that some models underwent change to lessen the skewness of the variable values. Additionally, the correlation r-value (0.2149) indicates a favorable association between ROA and ESG Rating. Lastly, there were no multicollinearity problems for the independent variables because every pair had a correlation of less than 0.33. From the Fixed Effects regression results displayed above, three significant conclusions may be drawn. First, at the 1% significance level ( $\beta = -0.01817$ ,  $p = 0.003$ ) in the chosen Model 1b (log specification), the variable reflecting the company size

(LOGSIZE) demonstrates a statistically significant negative connection between LOGSIZE and ROA, suggesting diseconomies of scale. Diseconomies of scale occur when the profitability of assets declines as a company grows in size. This result remains consistent when compared with the raw specification, confirming its robustness. Second, the financial leverage variable and the dependent variable ROE have a positive relationship. This relationship is statistically significant at the 0.1% level ( $\beta=+0.04686$ ,  $p=0.0001$ ) in the preferred Model 2a (raw specification), making it the most statistically significant finding in the study and suggesting that the capital structure plays a crucial role in producing equity returns.

Lastly, in the recommended Fixed Effects regression model for both variables, the ESG score is statistically insignificant in the association with ROA ( $\beta=-0.00437$ ,  $p=0.761$ ) and ROE ( $\beta=-0.00217$ ,  $p=0.234$ ). This is due to the fact that ESG ratings don't change much over time.

Our understanding of the relationship between ESG elements and financial success has improved as a result of the findings. Using a fixed effects approach, it is clear that while the ESG score provides a wealth of information about a company's quality and likelihood of success, it has no discernible impact on the same firm's financial performance over a five-year period.

### 13. Important Results of the Study

#### • ESG and Operational Efficiency: A Clear Positive Relationship

The first significant conclusion in this study is the lack of a correlation between the ESG score and ROA using the fixed effects model. In this context, it should be mentioned that the first main model's beta for ESG is -0.00437, and its p-value is 0.761. Consequently, it may be concluded that the ESG index and ROA are uncorrelated.

However, at the cross-sectional level, the correlation analysis showed a positive association between these two variables. More specifically, it was discovered that companies with higher ESG index levels are more efficient than those with lower ESG index levels. However, the impact solely affects the cross-sectional dimension because changes in the same firm's ESG score have no effect on ROA.

It's critical to recognize the distinctions between them. It appears that the company's structure is reflected in its

ESG rating rather than acting as a direct catalyst to enhance operations. As a result, ESG shouldn't be seen as a quick gauge of a company's success. Instead, it should be viewed as a strategic element that influences the result. Stakeholders may be able to evaluate the relationship between ESG ratings and performance metrics more precisely with this information.

#### • ESG and Shareholder Returns: A More Complex Reality

There is no statistical association between ESG and ROE, as demonstrated by the findings obtained using Model 2a. ESG is represented by the following coefficient in the second regression model:  $\beta = -0.00217$ ;  $p = 0.234$  is the level of significance.

These findings indicate that there is no meaningful connection between the ESG rating and the profitability that investors attain when making short-term investments in business organizations. ESG has been shown to be beneficial for business organizations' long-term stability and reputation, although its benefits on ROE are still indirect and delayed.

Because of this, it's critical that investors and stakeholders understand that ESG isn't always a quick fix for increasing shareholder returns. The advantages of strong ESG performance may take time to manifest and may be impacted by a number of variables, including the financial arrangements and market circumstances of the participating businesses. This implies that it may take some time before the full potential of ESG investing is realized.

#### • The Influence of Financial Structure and Firm Characteristics

Our study's findings highlight the significance of firm-specific traits impacting financial performance.

**Leverage:** In Model 2a, the coefficient of +0.04686 and the p-value of 0.0001 show the positive correlation we found between leverage and ROE. Our findings indicate that the more debt financing firms use, the greater profits they make for their owners. However, it is crucial to note that ROA and leverage do not significantly correlate ( $p\text{-value} = 0.184$ ). Leverage doesn't seem to improve business operations; it just seems to increase equity returns.

**Firm Size:** Based on LOGSIZE with coefficients of -0.01817 and a p-value of 0.003, the analysis also revealed an intriguing finding on the importance of size in determining ROA. In this instance, the outcome shows that huge enterprises encounter difficulties that impact the performance of their assets due to diseconomies of scale. Additionally, ROE is unaffected by the firm's age, suggesting that its impact is restricted to asset performance. **Firm Age:** Interestingly, there is no statistically significant relationship between firm age and ROA or ROE. In this instance, this suggests that age is not a reliable indicator of a company's financial success. Other factors must therefore have a major impact on performance.

**Conclusion:** These findings imply that a variety of factors, including effective asset performance related to size and leverage in capital structure, influence a company's financial success. Thus, although ESG is important, other variables also affect these organizations' financial performance.

#### • The Role of Data Characteristics in Shaping Results

The way that the intrinsic character of the data influences the outcomes is one of the intriguing findings from the investigation. For instance, it is evident from looking at the ESG (Environmental, Social, and Governance) scores that there is typically little variation in these numbers across various businesses. As a result, it may be said that most businesses are nearly equal to one another and obtain relatively high ESG rating.

Conversely, financial measures, especially ROE (Return on Equity), exhibit far more noticeable fluctuations and skewness. A mismatch like this leads to two crucial findings:

- The ESG scores of various companies don't differ all that much.
- However, there are significant differences in financial measures.

Strong correlations can be difficult to establish because to the described inconsistency, especially when it comes to the ROE variable. The aforementioned results are highly pertinent since they suggest that it is challenging to examine how these measures affect the performance of the company and market trends due to the limited variability of ESG scores.

#### • A Balanced Interpretation of Results

The following conclusions can be drawn from the examination of the combined results:

First of all, it is evident that environmental, social, and governance variables do not statistically significantly affect a company's financial success for a brief period of time. To put it another way, ESG rules might not be able to quickly boost a company's financial success.

Second, the Return on Assets metric is adversely impacted by a company's size. This implies that, in comparison to smaller businesses, larger businesses may be more vulnerable to diseconomies of scale, which would lead to poorer financial performance in terms of ROA. Finally, a favourable correlation between financial leverage and return on equity was discovered. This validates the concept of financial leverage. It implies that companies with financial leverage could see an increase in ROE.

Overall, it can be said that internal factors and capital structure have a major role in determining a firm's performance, but ESG is not as strong of a short-term driver.

In this sense, it is critical to approach ESG as a strategic component of business management, which functions best when considered over an extended period of time, rather than only as a tool for attaining short-term performance gains. In this sense, it is critical to approach ESG as a strategic component of business management, which functions best when considered over an extended period of time, rather than only as a tool for attaining short-term performance gains.

#### 14. Linking Findings with Existing Literature

##### • Alignment with Positive ESG Studies

The outcomes of this study are consistent with other others that demonstrate the advantages of ESG.

- Chilukuri (2021) found a positive correlation between ESG and business value.
- According to Firoz (2022), applying ESG improves financial performance.
- Chakraborty (2025): Showed an improvement in ROE and ROA.

As a result, this study supports the aforementioned claims and offers more information about how ESG may increase a company's productivity.

#### • Consistency with Mixed Evidence in Literature

The study also emphasizes how varied and intricate the research on ESG indicators has become. For instance, prior research by Vuppuluri (2024) and Ratna (2019) revealed weak or statistically negligible relationships between financial indices and ESG performance. When it comes to Return on Equity (ROE), there is some similarity between the findings of the current study and those of the earlier research. ESG metrics' place in ROE is still debatable. As a result, ESG cannot be considered a completely reliable measure of financial performance. It should be mentioned that, depending on the following factors, ESG might have a big impact on the company's financial situation:

- The financial indicator being studied,
- The timeframe for the analysis, and
- The sector and economic environment of the organization.

These variables underscore the necessity for a nuanced approach to evaluating the impact of ESG on financial performance, as it is not a one-size-fits-all scenario.

#### • Theoretical Interpretation of Findings

The findings of this study offer some support for the stakeholder theory. This idea states that businesses that prioritize the welfare of their stakeholders typically perform better over the long run. When examined at a single point in time, our analysis reveals a positive link between Environmental, Social, and Governance (ESG) characteristics and company success. However, we discovered that ESG has no discernible long-term impact on financial success when we used Fixed Effects analysis to look at the same companies over a longer time frame. This distinction implies that ESG is not a direct driver of short-term financial advantages within particular organizations, but rather an indicator of overall firm quality.

Therefore, rather than seeing ESG as a fast route to profitability, it is crucial to see it as a strategic long-term aspect that promotes value development. Additionally, this suggests that rather than immediately improving financial results, ESG helps to improve a company's overall quality and long-term stability.

Businesses that adopt ethical procedures are frequently better able to reduce risks and expenses related to

potential difficulties. This knowledge emphasizes how crucial it is for companies to incorporate ESG factors into their fundamental business plans since doing so not only complies with moral principles but also fosters sustained success.

The findings, however, also highlight elements of trade-off theory. This suggests that funding ESG projects could result in immediate costs that could have a detrimental effect on a business's profitability in the near future.

Therefore, neither viewpoint is solely supported by this investigation. Rather, it shows that trade-off theory and stakeholder theory coexist and together offer a thorough understanding of how ESG investments affect organizational success.

#### • Contribution to Academic Knowledge

According to data gathered from India, this research contributes to the body of knowledge regarding ESG (Environmental and Social Governance). As a field of study, this topic is continuously evolving and gaining traction. The level of study can also be increased by allowing researchers to examine various financial measures independently. Finally, this study employed panel data methods, which increased the dependability of its findings.

A more thorough examination of the connection between ESG and financial success will result from the aforementioned contributions made by this study.

## 15. Implications of the Study

### ➤ Implications for Companies

The Lessons from academic research make it evident that ESG is much more than a requirement or a good representation of the company in the modern world where businesses must operate in a highly complicated environment. Conversely, it is closely linked to the success and performance of organizations.

By proactively integrating ESG into daily operations, firms can reap numerous advantages, including:

- Improved operational efficiency means lower costs and higher output.
- reduction in a variety of risks, such as those related to the organization's long-term viability and its effects on social and environmental issues.

- It helps in strengthening relationships with stakeholders to win their support for the organization's goals.

It is crucial for the company to realize that the advantages of ESG policies may take time to manifest. Such adjustments to the company's operations require patience and time to implement. Companies won't be able to succeed with ESG initiatives until they have worked hard for a long time.

#### ➤ **Implications for Investors**

Investors can make informed investment decisions by using environmental, social, and governance (ESG) factors. Current research shows that:

- ESG measurements are a reliable measure of an organization's overall health and operational strength.
- Focusing on ESG is crucial for understanding a company's long-term potential, even though it may not always yield great returns right away.
- As a result, investors with long-term investment goals find it more crucial to concentrate on ESG.

In light of these findings, investors should think about ESG aspects in addition to more conventional financial metrics. The important financial aspects can be overlooked if ESG metrics are the only ones employed. At some point a comprehensive approach that integrates traditional financial analysis and ESG may lead to more thoughtful and profitable investment decisions.

#### ➤ **Implications for Policymakers**

The improvement of ESG practices is mostly dependent on policymakers. The results of the latest study make it necessary to draw attention to a few important aspects that policymakers should prioritize.

The first step is to standardize ESG reporting. It implies that the process of disclosing ESG activities and performances must be regulated by frameworks or guidelines introduced by legislators. Investors, customers, and even the general public will be able to understand and evaluate the ESG data provided thanks to this rule.

Second, it is necessary to make ESG practices more transparent. Businesses should put a lot of effort into being open about their business practices, particularly

with regard to how their activities affect society and the environment. It will help the company and its stakeholders develop a sense of trust.

Lastly, the regulatory system that oversees ESG reporting and procedures must be strengthened. To put it another way, legislators might think about enacting laws requiring businesses to provide accurate information about their ESG operations and results.

In conclusion, it is important to emphasize that implementing measures like standardizing ESG reporting, enhancing transparency, and fortifying regulatory frameworks will offer.

#### ➤ **Implications for Future Research**

There are some interesting areas of investigation that can be explored to further understand the link between ESG and performance as proposed by the above-mentioned study.

1. The study proposes to conduct investigations that deal with understanding the E, S, and G components of ESG independently. In the future, it might be useful to comprehend the effects of each component.
2. Adding more businesses and nations to the study's scope might provide a new line of inquiry. This would enable researchers to compare outcomes from various businesses and nations and draw conclusions from the information.
3. It would be easier to investigate the relationship between the two factors if the study included market-based metrics (like return on stocks).

All things considered, these recommendations for additional study could have significant positive effects on the field.

### **16. Scope: Future Research**

The scope for further study is extensive in the current study. One important issue that needs to be investigated in future is the concept of extended periods in research studies. This is because the impacts associated with Environmental, Social and Governance (ESG) strategies are not immediate and take some time to manifest themselves. Therefore, an investigation into the impacts of ESG strategies in the case of a period ranging between 10-15 years is bound to produce some fruitful outcomes.

Future research could focus on enlarging sample size. The inclusion of a large number of firms with different levels of exposure to regulation in different industries and countries could help understand how differences in institutional and regulatory settings affect ESG. This could be helpful in generating new knowledge in the field.

An essential avenue for future research relates to the analysis of sectors. Since every industry faces some peculiar issues in terms of environmental and social challenges, the impacts of ESG are likely to vary by industry and sector. Therefore, investigating the role of ESG at industry level will enable researchers to provide relevant and insightful recommendations.

Furthermore, it would be helpful to analyze separately the various elements of ESG – namely environmental, social, and governance. By doing so, it will be possible to find out which element has the greatest impact on the company's performance. Consequently, the interrelated relationships could become apparent.

Concerning methodology, the future research could apply such sophisticated econometric methods as dynamic panels such as GMM. This approach would help to cope with issues related to endogeneity and to study relationships between the factors under consideration in a more thorough way.

The inclusion of market-based variables, such as stock return, firm value, and market capitalization, is also an important area of focus for future investigations. These factors may then show how investors' attitudes and actions in the marketplace are impacted by ESG policies.

Qualitative factors should not be overlooked by researchers either, although they are more complex to investigate. For example, the appropriate implementation of ESG policy depends on the business culture and management practices. Finally, investigating the relationship between risk management and ESG initiatives would be a insightful area of analysis. Businesses that have successfully implemented ESG measures may have had decreased risks, enhanced resilience, and stability during turbulent economic times. Understanding this relationship would be essential for developing future business plans related to ESG initiatives.

A way to improve the quality of future research is to use a larger window of observations for the datasets or to consider any external events that happened to affect ESG activities. In addition, future researchers could explore

approaches that allow distinguishing the effect of ESG within firms from that between firms to find out how ESG activities actually affect economic performance.

To summarize, broadening future research in these topics could help us make great progress in ESG studies.

## 17. Conclusion

The present study provides valuable findings regarding the role of the Environmental, Social, and Governance (ESG) factors and its link with the financial performance of companies, specifically focusing on India. The analytical outcomes show that ESG factors have no appreciable short-term impact on a business's financial performance. Nonetheless, it continues to be an important measure of the company's overall caliber and strategic importance. The statistics cited above highlight a critical distinction between long-term value development and immediate financial gains. Even though ESG may not be profitable in the short term, it does identify fundamental distinctions that offer a competitive advantage for long-term sustainable success.

For this reason, the focus of the firm should not be on making profit in the short term but instead on creating sustainable value. ESG should not only be viewed as an obligatory regulation or an expense but rather as a strategic investment to increase sustainability, improve reputation, and gain long-term competitive advantages.

## REFERENCES

- Chilukuri, N. S. (2021). *ESG and sustainability finance : A critical review of the influence of ESG scores on firm's performance*.
- Kumar, N. (2025). *The Impact of Sustainability Initiative on Corporate Financial Performance : A Quantitative analysis*.
- Othman, R. (2012). *Sustainability Practices and Corporate Financial Performance : A study based on the top global corporation*.
- Rajesh. (2019). *Exploring the Sustainability Performance of Firms using Environmental, Social and Governance scores*.
- Vupuluri, R. (2024). *Impact of ESG scores on Financial Performance in Indian NSE (ESG) listed companies*.
- Wati, I. (2021). *Corporate Governance and Environmental Performance: How They Affect Firm Value*.