

ESG SCORES RELATIONSHIP WITH FIRM PERFORMANCE: PANEL DATA EVIDENCE FROM THE EUROPEAN TOURISM INDUSTRY

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ABSTRACT

Purpose – This paper aims to investigate if there is a significant relationship between corporate ESG (environmental, social, and governance) scores and firm profitability (ROA) and whether this relationship is positive, negative, or neutral.

Methodology – The study examines all listed companies from the European tourism industry for which ESG scores are available. The final sample consists of 48 firms from 14 European countries and 258 firm-year observations, obtained through the Refinitiv database for the period from 2010 to 2019. Panel regression analysis was used to examine the relationship between ESG scores (independent variable) and ROA (dependent variable), including financial leverage and firm size as control variables as well.

Findings – The results show that ESG scores are negatively related to firm performance as measured by ROA and such a relationship is statistically significant at 5%. Higher levels of ESG scores are associated with lower levels of ROA and vice-versa.

Conclusion –The findings suggest that instead of just trying to give the appearance of being ESG-oriented, it is important for companies to actually implement proper ESG practices and standards. Also, in order to promote the adoption of environmental, social, and governance (ESG) practices by companies, it is crucial to educate the public about the long-term benefits of these practices and encourage support for companies that follow these standards.

Keywords: ESG score, tourism, profitability, Europe.

JEL Codes: G30, Q56, Z33.

1. INTRODUCTION

The tourism industry is a vital contributor to the economic development of European countries. In 2021, it contributed 1450.1 billion dollars to the GDP and supported 34.65 million jobs in Europe, despite the negative impact of the Covid-19 crisis (Statista Research Department, 2022). Tourist attractions, hotels, restaurants, and other tourism-related businesses are major drivers of economic activity and employment in many parts of Europe, making the sector an important contributor to the overall prosperity of the region. As such, it is important to understand the factors that influence the performance of firms in the tourism industry, including those related to environmental, social, and governance (ESG).

ESG refers to the three central factors (environmental, social and governance) in measuring the sustainability and ethical impact of an investment in a company or business. These criteria help to better understand the potential risks and opportunities associated with a company. The importance of ESG has grown significantly in recent years as more and more investors seek to align their investments with their values and make a positive impact on the world. Companies with strong ESG practices are often seen as more responsible and sustainable, which can lead to better long-term financial performance.

In recent years, there have been several significant developments in the ESG space. One notable example is the increasing focus on climate change and the role that businesses can play in addressing this global challenge. There has also been a greater emphasis on diversity, equity,

and inclusion, as well as on supply chain transparency and labor practices. As a result, more and more companies are starting to report on their ESG efforts and performance.

The Sustainable Stock Exchanges Initiative (SSE), a partnership between the United Nations and stock exchanges, aims to encourage sustainability in the capital markets. In 2015, the SSE issued principles calling on stock exchanges to encourage listed companies to report on their environmental and social impacts using internationally recognized standards, such as the Global Reporting Initiative or the International Integrated Reporting Council. All large enterprises listed on participating stock exchanges should be required to report on their ESG impacts by 2030 at the latest. (Sustainable Stock Exchanges Initiative, 2022)

European countries are at the forefront of the global push for sustainable economic development, and ESG practices have become increasingly important for businesses in all sectors. ESG scores have been shown to be related to firm performance in various industries, but there is still much to be learned about the specific relationship between ESG scores and firm performance in the tourism industry.

This study aims to examine the relationship between ESG scores and firm performance in the European tourism industry. The tourism industry is an interesting context in which to study this relationship due to its importance to the economies of European countries and the increasing focus on sustainability in the sector. By examining the relationship between ESG scores and firm performance in the tourism industry, we can gain a better understanding of the potential benefits of adopting ESG practices for firms in this sector and we can provide valuable insights for firms in the tourism industry and policymakers seeking to promote sustainable economic development in Europe.

2. LITERATURE REVIEW

There is ongoing debate and research surrounding the relationship between environmental, social, and governance (ESG) practices and a company's financial performance. While some studies have found that companies with strong ESG performance tend to outperform their peers financially, others have found no significant relationship or even a negative relationship.

For example, Derwall et al. in 2004, found that socially responsible investing, led to superior portfolio performance. Companies with high eco-efficiency scores, had significantly higher returns than companies with lower scores over the 1995-2003 period. Albitar et al. (2020), found that ESG disclosures positively impact financial performance in FTSE 350 firms. Their study also found that ownership concentration, board size, and gender diversity moderate this relationship. The introduction of integrated reporting was found to have a positive effect on the relationship between ESG disclosures and financial performance for firms that adopted it, suggesting that improving ESG practices and integrating ESG information into financial reports may enhance financial performance. Similarly, Alareeni and Hamdan's study in 2020 found a significant positive relationship between ESG index and a company's operational and financial performance, but curiously a negative relationship with its market performance. Recently, Carnini et al. (2022) found a positive association between sustainability practices (as measured by ESG scores) and increased performance (as measured by EBIT and ROA) in Italian businesses, suggesting that companies with strong sustainability practices may be able to increase performance through increased sales, as consumers may be willing to pay a premium for products and services from sustainable businesses.

However, a study conducted by Atan et al. (2018) that examined the impact of ESG factors on the performance of Malaysian public-limited companies in terms of profitability, firm value, and cost of capital concluded that there was no significant relationship between ESG factors, neither individually, nor combined, and firm profitability or firm value. Also, in another study by Junius et al. in 2020 aimed at investigating the impact of ESG performance on a company's performance and market value in four ASEAN countries (Indonesia, Malaysia, Singapore, and Thailand) found no significant influence of ESG score on performance or market value.

Some studies have even pointed to negative ESG-performance relationship. One such study is the one conducted by Wasiuzzaman et al. (2022), which analyzed the relationship between ESG disclosure and firm performance in the energy sector, taking into account the role of cultural dimensions. Their results showed that ESGD had a negative impact on profitability and that cultural dimensions of power distance and long-term orientation significantly moderated the relationship between ESGD and financial performance.

As can be seen from our literature review, empirical evidence on this topic is mixed, and more research is needed to fully understand the relationship between ESG practices and financial performance. Despite this uncertainty, there is growing evidence that companies with strong ESG performance may be more financially successful. Based on this assumption, we expected a positive relationship of ESG with financial performance. Hence, we have formulated our hypotheses as follows:

H1: ESG scores are positively related to financial performance of European tourism firms.

3. DATA AND METHODOLOGY

In this study, a panel regression model is used to analyze data from the Thomson Reuters (Refinitiv) database for 48 tourism European firms over a period of 10 years, from 2010 to 2019, resulting in a panel of 258 firm-year observations. The small sample size is due to the fact that not all listed companies disclose information about their ESG performance. The years before 2010 and after 2019 were excluded to avoid the impact of the global financial crisis and the more recent covid-19 health crisis. To measure financial performance, which is the dependent variable in this study, we follow previous research in using the return on assets ratio (ROA) (Albitar et al., 2020; Carnini et al., 2022; Demiraj et al., 2022; Habibniya et al., 2022; Wasiuzzaman et al., 2022). Environmental, social, and governance scores (ESG) which is the independent variable, were obtained from the Thomson Reuters (Refinitiv) database for all firms with such disclosures in the European tourism industry.

In addition to the ROA and ESG scores, two control variables are also included in the model to capture the effects of other factors influencing performance, i.e., financial leverage (FLEV), and size (S). The data used in this study was not cleaned of outliers, but rather winsorized at the 2% level using STATA software.

The below model has been adopted to test our hypothesis.

$Performance = f(ESG, Control Variables)$

$PERFORM = \alpha it + \beta 1ESG + \beta 2CONTROL VARIABLES + FIXED EFFECTS + \epsilon it$

Where: PERFORM refers to ROA of firm *i* in year *t*; ESG refers to environmental, social and governance scores; and control variables refer to FLEV, and S. Country (CTY) and year (YR) are the fixed effects, included in the model. ϵit represents the error term.

4. FINDINGS

The descriptive statistics table (Table 1), presents the number of observations, mean values, standard deviation, and min/max values, in addition to the skewness and kurtosis for each variable. The significant standard deviation values of ROA and ESG reveal that individual values deviate significantly from the mean, indicating contrasting performances of tourism firms in the sample, both financially and in the sustainability dimension. The same can be said about the significant standard deviation of financial leverage, which speaks of extreme choices in capital structure among the European tourism firms. To deal with the outliers, instead of removing them we have winsorised all variables at 2%. Probability distributions are fairly symmetrical with a moderate right tailed skewness for the Size which is to be expected considering this is a log-normal distribution derived from the logarithmic values of firm size.

Table 1: Descriptive Statistics

Variables	Observations	Mean	Std. Dev.	Min.	Max.	Pr (Skewness)	Pr (Kurtosis)
ROA	258	0.11	0.09	-0.01	0.37	0.00	0.00
ESG	258	55.33	20.24	12.29	84.93	0.00	0.00
FLEV	258	0.98	1.12	-1.54	4.71	0.00	0.00
SIZE	258	21.51	1.42	18.73	24.43	0.78	0.00

The correlation matrix table (Table 2) shows how each of the variables in the model are related to each other. It shows that the dependent variable (ROA) is significantly correlated with all the other variables, which justifies their inclusion in the regression model. The correlation between ROA and ESG is negative, which suggests that there may be a negative relationship between them. However, we will need to look at the results of the regression analysis to determine the exact nature of their relationship.

The independent variables in the model do not have any statistically significant correlations with each other. The only exception is the ESG and Size variables, which have a significant correlation. This could potentially cause issues with multicollinearity in the model, but the VIF values obtained did not indicate any such problems.

Table 2: Variables Correlation Matrix

Variables	ROA	ROE	FLEV	SIZE
ROA	1			
ESG	-0.2896*	1		
FLEV	-0.3237*	0.0211	1	
SIZE	-0.5426*	0.6322*	0.1164	1

*Statistically significant at 5%.

Despite the correlation matrix offering a general idea of the association among the variables, we refer to the results of the panel regression to draw conclusions about the impact of ESG scores on the financial performance.

Table 3 presents the results of the panel regression model regarding the relationship of ESG scores with ROA. We ran the model in four variations, i.e., with no dummy, with year dummy, with country dummy and with year and country dummy. Based on the Hausman test values only the fixed effects are analyzed and interpreted.

Table 3: Panel Regression Results for the ESG - ROA Relationship

Variables	No dummy ROA	Year dummy ROA	Country dummy ROA	Year and country dummy ROA
ESG	-0.001* 0	-0.001** 0	-0.001* 0	-0.001** 0
FLEV	-0.004 (0.003)	-0.003 (0.003)	-0.004 (0.003)	-0.003 (0.003)
SIZE	-0.056***	-0.061***	-0.056***	-0.061***

	(0.007)	(0.008)	(0.007)	(0.008)
_cons	1.363*** (0.144)	1.476*** (0.158)	1.363*** (0.144)	1.476*** (0.158)
Observations	258	258	258	258
R-squared	0.372	0.388	0.372	0.388
Adj R2	0.22	0.205	0.22	0.205
Hausman test (Prob > chi2)	0.0000	0.0000	0.0000	0.0000

Standard errors are in parentheses; *** $p < .01$, ** $p < .05$, * $p < .1$

Of all the models, the year-dummy model generated the strongest and most significant ESG-ROA relationship. The inclusion of the country dummy appears to not have added value to the model. Despite the relatively small number of control variables, the R2 value (0.388) is considered good enough. It means that the variables used have a satisfactory explanatory power of the variances in the dependent variable. Low R2 values are common in social sciences where samples are comprised of elements (i.e., individuals/firms) with diverse characteristics.

Based on the regression results, we conclude that our main hypothesis according to which ESG scores are positively related to the financial performance of European tourism firms, is rejected. The relationship is negative with a coefficient of -0.001. An increase of 1 point in the ESG score of the tourism firms is associated with a decrease of ROA by 0.001 points. At first glance it might look like a negligible impact, but if we consider that the mean value of ROA in our sample is merely 0.11 it represents almost a 1% change in ROA.

These results go against the mainstream research on this topic that point to a positive relationship, and are further proof that the debate on whether adherence to ESG standards affects firm performance positively or negatively is not settled yet. Further research in this field is needed.

5. CONCLUSION

The results regarding ESG relationship to ROA suggest that instead of being a driving force for the enhancement of operational efficiency and financial profitability, the focus on achieving ESG goals is having the opposite effect for European tourism firms. These results are consistent with Wasiuzzaman et al. (2022).

There could be a few plausible explanations to this odd behavior. For example, the costs associated with implementing ESG practices may outweigh the benefits. There are significant costs associated with implementing ESG practices (e.g. costs incurred to reduce carbon emissions, improve working conditions, or improve governance practices). If a firm is not able to implement the required changes in a smart and efficient way, using them as a mechanism to increase revenues and/or reduce costs, they may end up in a situation where the costs of implementing ESG practices are not offset by its benefits, leading to a declining financial performance.

Another explanation could be that the market does not yet value ESG practices as highly as other factors. If this is the case, a firm's efforts in relation to ESG goals/practices does not translate into a better reputation, and its products or services are not more appealing than their peers', which did not incur any costs on ESG, putting them at a disadvantage.

Further, the results may point to a lack of alignment between the company's ESG practices and overall business strategy. If a company's ESG initiatives are and not well-integrated with its other operations, but instead are undertaken just for the sake of regulation or disclosure requirements, they may not contribute to the company's overall financial performance.

Additionally, the findings may be a signal that companies may be engaging in "greenwashing". Some firms may engage in some forms of ESG-related marketing without actually implementing meaningful changes to their operations or practices. If perceived by investors, customers, suppliers and employees, especially in societies highly conscious to ESG standards, this strategy can have the opposite effect to the one intended or desired, ultimately harming financial performance.

Finally, ESG initiatives may be seen as a distraction or a burden by some investors. Some investors may view efforts related to ESG as unnecessary or even counterproductive. Hence, they may be reluctant to financially back these kinds of initiatives, leading to a shift of financial support to the less ESG oriented firms.

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