# The Role of ESG Factors in Improving Firm Financial Performance

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**Abstract**

*The present research investigates the correlation between environmental, social, and governance (ESG) factors and financial performance, dissecting the impact of each element on a company's profitability. The study focuses on small and medium-sized enterprises (SMEs) situated in the South-East of Romania within the construction sector, spanning a five-year period (2016-2021). The empirical findings reveal a positive association between ESG practices and financial performance, pointing out that enhancing ESG initiatives could effectively improve profitability of SMEs.*

**Key words:** financial statements, ESG, return on equity, construction sector
**J.E.L. classification:** G30

## 1. Introduction

The European Green Pact's objective of reducing pollutant emissions by at least half (European Commission, 2019) requires a reorientation of company practices (including those in Romania) to minimize the impact of their activity on the environment. The literature has shown that adopting environmental practices usually leads to good environmental performance (Melnyk et al, 2003; Annandale et al, 2004; Zhu et al, 2004). However, good levels of environmental performance can be achieved based on the implementation of different types of environmental practices, practices that do not always have the same effects on environmental performance (Henri et al, 2008).

In a study, R.D. Klassen, and D.C. Whybark (Klassen et al, 1999, p.3) indicate that proactive environmental pollution technologies exert a positive influence on firm performance, while end-of-pipe technologies do not. More recent studies have shown that a high level of firm performance coincides with a high level of environmental performance only if the technologies used by the firm's environmental management have a proactive pollution orientation (Wagner, 2005, p.2).

Social responsibility, as a measure of the degree to which firms fulfill their legal, economic, ethical, and philanthropic responsibilities to society has become highly relevant in achieving economic benefits. Cho, Chung and Young (Cho et al, 2019, p.3) demonstrate the positive association between corporate social responsibility and firm performance using financial-accounting and market indicators. It is worth noting that the sector of activity greatly influences the analysis of the dependence between social responsibility and financial performance. In the same study, (Cho et al, 2019, p.15) it is shown that the impact of social responsibility is greater for firms in the service sector compared to those in manufacturing industries. The social role of firms (especially large firms) is greater as public perception is quickly influenced by social decisions. From a cost perspective, some of the research in the field of social responsibility shows that, in general, firms' social actions lead to higher profits. However, a small number of studies show the opposite, i.e. that social responsibility generates costs that exceed profits (McWilliams et al, 2001, p.5).

Corporate governance, in the view of some authors, refers to the issue of agency (Roy, 2016, p.3) and refers to the way in which financial decisions made by those at the top of companies are influenced. From an investors' perspective, corporate governance is of great interest because it provides information on the accuracy, transparency and sustainability of financial reporting and auditing. Sustainable reporting has the merit of reflecting, beyond financial aspects, organizational change, and development (Lozano et al, 2016, p.25). The motivation to report and weigh results from the perspective of economic, social, sustainable, and environmental dimensions, driven by numerous factors, has been highlighted in this context (Engert et al, 2016). It has also demonstrated the need for managerial attention to the appropriate use of control levers that precede financial reporting and address non-compliance during the decision-making process.

## 2. Literature review

The growing recognition of climate change and concerns related to human capital are steering companies toward considerations beyond conventional financial profits. Specifically, the evolving attitudes of the global community towards sustainability issues, coupled with the accessibility of environmental, social, and governance (ESG) indicators, are drawing investors towards socially responsible investment choices.

According to some authors (Bassen and Kovacs, 2008, p.1), ESG indicators are designed to encompass dimensions of financial performance that are not addressed in accounting data. They contend that financial reports of companies lack information pertaining to aspects such as reputation, quality, brand equity, and safety. As a result, analyzing ESG practices and may lead to improved financial results.

In terms of financial performance, there are a wide variety of financial indicators as ways of measurement such as percentage of sales related to new products, profit rate (PM), earnings per share (EPS), return on assets (ROA), return on equity (ROE), return on invested capital (ROCE) (Salawu, Akinlo, 2005, p.3; Selvarajan et.al., 2007, p.10; Hsu et.al., 2007, p.4). In addition, return on investment ROI and net profit after tax NIAT have also been used as indicators to measure financial performance. For our research, a traditional metric has been considered the main indicator of financial performance, i.e. return on equity (ROE). (De Lucia et al, 2020, p.2; Alareeni et al, 2020, p.4; Qureshi et al, 2021, p.2; Akbar et al, 2020, p.4).

Various theoretical frameworks offer explanations for the connection between ESG practices and and financial performance (FP). The stakeholder theory supports a positive relationship between ESG and FP, while the trade-off theory argues for a negative relationship. On the other hand, the slack resources theory proposes a positive relationship between FP and ESG, whereas the managerial opportunism hypothesis suggests a negative relationship between FP and ESG.

The positive correlation between ESG and financial performance may be attributed to the fact that companies with higher profits possess higher resources to invest in ESG-related activities. It is also plausible that profitability increases when a company adequately manages its ESG-related risks. Alternatively, it might be a combination of both factors. If it is indeed a mix of both, it implies that initiatives promoting good ESG practices contribute to enhanced financial performance. This, in turn, provides the financial means to further invest, making the company even more proficient in ESG matters, thus leading to improved performance in a continuous cycle. In their study, Whelan, Atz and Clark (Whelan et al., 2021, p.4) reported that, out of more than 1000 research studies published between 2015 and 2020, 58% found a positive link between financial performance (measured as ROA or ROE) and ESG.

Therefore, previous literature referring to the link between ESG factors and financial performance demonstrated a strong connection between the two. Hence, a favorable correlation between ESG factors and financial performance metrics such as ROE has been established (DeLucia et al, 2020, p.2). Some studies (Alareeni et al, 2020, p.10) argue that larger companies experience enhanced operational and financial performance (measured by ROA and ROE) with increased disclosure of ESG factors.

A favorable correlation between the ESG and ROE was also established in the case of Chinese real estate companies. (Shao, 2022, p.1041). Hence, real estate businesses ought to adopt green design, standardize the use of environmentally friendly building products, and implement green construction practices to conserve resources and minimize pollution. This way, ESG practices enable companies to pursue long-term sustainable development.

Whether testing the nexus between FP and E, S, G separately (Atan, 2018, p.2; Ahmad, 2021, p.4) or combined, the correlation varies based on the specific ESG pillars considered, the type of FP metrics employed, and the nature of the industry. Firm size also matters (Ahmad et al, 2023, p.6), along with other sectorial variables.

## 3. Research methodology

To conduct this research, an analysis of the financial documents was carried out. Thus, for a sample of 300 Romanian companies in the construction sector located in the South-East region, ROE was calculated.

Subsequently, a survey was conducted. A questionnaire was used as the survey instrument. The perceptions of employees, customers, partners, and civil society operating in the sector under analysis were targeted. The questionnaire was designed on a Likert-type scale, with scores from 1 to 5, where 1 represented the minimum score that could be attributed to a statement, representing the respondent's total disagreement with that statement, and 5 represented the maximum score, expressing the respondent's total agreement.

Consequently, a dependency was tested by correlating the results obtained from respondents' answers with the results obtained from financial statements. A credit scoring model was used to ensure data comparisons (absolute values obtained for ROE were transformed into scores). This made it possible to make correlations.

Given that the central objective of the research undertaken is to identify the impact of non-financial factors on a company's financial performance, i.e. to measure the influence of all environmental, social and governance factors on the results of the company's activity and the extent to which they lead to superior financial performance, a series of hypotheses were formulated as follows:

- *H1: There is a positive correlation between the environmental responsibility of Romanian companies and ROE.*
- *H2: There is a positive correlation between the social responsibility of Romanian companies and ROE.*
- *H3: There is a positive correlation between the governance model promoted by Romanian companies and ROE.*

To validate the hypotheses, a series of statistical tests were carried out. In case of validation of all the hypotheses, i.e. H1-H3, it is considered that all the factors of non-financial performance have a significant influence on the financial performance; hence, an improvement of any of the considered factors will lead to a higher non-financial performance, and ultimately to higher financial results.

The research carried out aimed at identifying those significant correlations between the variables analyzed through the questionnaire and the profitability variable (ROE). The existence of dependency relationships between variables was investigated based on the calculation of Pearson correlation coefficient (parametric correlations).

## 4. Findings

The three variables analysed through the questionnaire (independent variables) allowed the assessment of the non-financial performance of the studied companies through the perceptions of the respondents of this study. Thus, the scores of the three investigated variables led to a non-financial performance score of 3.415 points, out of a maximum of 5 points - Table no. 1. The highest score was recorded by the variable called Environmental responsibility and the lowest score was recorded by the variable called Corporate governance.

The total score obtained for the assessment of non-financial performance, as a measure of all three factors included in the study, indicates a mediocrity of the companies in the sector analysed. Thus, although non-financial performance scored an apparently acceptable 3.410 out of a maximum of 5 points, in reality it is far from satisfactory. The companies in the sector under review cannot be considered as excellent performers - they do not excel in all aspects of the business - so they cannot be classified as non-financial performers.

A number of negative aspects regarding the factors used in assessing non-financial performance were highlighted. These refer to:

- employees do not have a fair system of promotion at work;
- the companies analysed do not have employees from all social categories;
- existing equipment has not been fully replaced by energy efficient equipment;

- employee access to information is restricted;
- not enough financial resources are allocated to waste recycling activity;
- the employee promotion system is often corrupt;
- management does not take an interest in employee and customer grievances and is often primarily concerned with making higher profits;
- companies have little involvement in raising awareness of human action on the environment, no responsible attitude towards natural resources and no campaign to clean up nearby beaches.

*Table no. 1 Summary of non-financial performance results*

| No. | Non-financial variables | Score |
|---|---|---|
| 1. | *Social responsibility* | **3,443** |
| 2. | *Environmental responsibility* | **3,349** |
| 3. | *Corporate governance* | **3,193** |
| ***Non-financial performance- Total*** | | ***3,410*** |

*Source:* Authors' own processing

Although employee perceptions of the non-financial variables studied indicate the existence of average-level performance within the sector under analysis, they do not provide concrete evidence on the losses, or conversely, the profits associated with higher levels of non-financial performance, the effects of increased non-financial performance on the financial results of firms, or the extent to which the variables studied may be determinants of financial performance. Accordingly, we continued the analysis to identify the extent to which these factors have a significant impact on financial performance.

This research aimed to identify those significant correlations between the variables analysed through the questionnaire and ROE. The existence of dependency relationships between the variables was investigated by calculating the Pearson correlation coefficient r and $r^2$ (parametric correlations) - Table no. 2.

The significant influence of the variable measuring social responsibility on ROE is revealed by the high, positive value of the Pearson correlation coefficient (0.772). This first identified dependence underlines the need for firms to intervene in public perception, as it is a key factor in obtaining financial benefits. Therefore, the social impact of the companies' activities is mitigated as a result of improving the image in the eyes of society, but also in the eyes of employees. The conclusion is that social responsibility has a positive impact on companies' profitability.

*Table no. 2 Pearson correlations between non-financial performance variables and ROE*

| Indicator | ROE |
|---|---|
| *Social responsibility* | r=0,77231<br>$r^2$= 0,5961 |
| *Environmental responsibility* | r=0,76101<br>$r^2$= 0,57913 |
| *Corporate guvernance* | r=0, 74735<br>$r^2$= 0,55853 |

*Source:* Authors' own processing

Social inclusion, effective resource management, coordinating and involving employees, solving problems quickly, resolving work conflicts, practicing results-based reward schemes are all attributes of effective management. In our research, it has been shown that the existence of effective management (governance variable) has a strong, positive influence on the financial results of companies in the sector under analysis, so that it leads to increased profitability and leads to improved financial structure, with a positive impact on financial performance.

Environmental responsibility moderately influences firm profitability, as shown by Table 4.2. It is thus demonstrated that adopting a responsible attitude towards the conservation of the natural environment, increasing focus on recycling, using green energy and adopting measures to improve health of employees (European Green Pact goals), leads to an improvement in the financial structure, generating additional income for companies. Therefore, an increased responsibility towards the environment has a direct effect on financial performance of Romanian companies.

The high, positive values of the correlation coefficients r and $r^2$ between the non-financial performance variables and ROE (Table 4.2) demonstrate the existence of a strong dependence between them, so we consider *that hypotheses H1-H3 are validated*.

## 5. Conclusions

In the context imposed by the European Green Pact, the need has arisen for European companies to take concrete steps to ensure a future neutral climate. Companies within the construction sector in Romania have made significant investments in this sense, but the financial results will certainly be achieved over a longer time horizon.

The present research confirms the results of previous studies in the field, namely the existence of a nexus between social, environmental and governance factors and firm financial performance. Whether examining the connection between ROE and environmental, social and governance factors individually or collectively, results have shown that in case of Romanian SMEs, there is a positive correlation. Consequently, improved profitability may be achieved by allocating resources for ESG practices.

A future research direction could involve expanding the analysis to other regions of Romania or even at national level. In this way, the obtained results could provide a comprehensive picture of the Romanian construction industry and would allow formulating conclusions regarding the possibilities to improve financial performance of this sector.

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