

# Environmental, Social and Governance

Subjects: Business, Finance

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The world is constantly changing, and with an evolving global environmental crisis, there is a growing trend of Corporate Social Responsibility, and Environmental, Social, and Governance (ESG) disclosure initiatives. The final report on the new E.U. taxonomy for sustainable activities was released in 2020, making ESG disclosure more relevant. Environmental, Social, and Governance refers to non-financial information about how a firm deals with issues on this matter, and its importance for firm valuation is growing. Even though ESG information might lack standardisation, scholars argue that it can help adapt to environmental changes and even be a part of a company's competitive strategy.

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## 1. Introduction

Forty years after the first world climate conference held in 1979, the bioscience journal published a statement. Recognised by 11.000 scientists from more than 150 nations, the message is clear: "There is no time to lose", referring to the quickly accelerating environmental crisis ([The Guardian 2019](#)). Climate change is one of the numerous factors contributing to the growing interest in Corporate Social Responsibility (CSR) among both businesses and scholars; the latter has led to several publications over the past few years (e.g., [Hoi et al. 2018](#); [Vu et al. 2020](#); [Jia 2020](#)).

There is an ongoing trend in the literature regarding the ESG initiatives ([Fijałkowska et al. 2018](#); [Hang et al. 2019](#); [Beck et al. 2018](#)). In line with the CSR trend that has evolved over recent decades, both investors and companies wish to be socially conscious. Thus, the attractiveness of sustainable investment has increased. Focusing on the ESG initiatives, net flows into sustainable funds in the U.S totalled \$20.6 billion in 2019 and have almost quadrupled compared with the previous year ([Morningstar Inc. 2020](#)). Future-oriented investors strongly believe that non-financial information such as Environmental, Social, and Governance issues are necessary to build a sustainable global economy ([Jitmaneeroj 2016](#)).

## 2. Environmental, Social, and Governance (ESG)

Environmental, Social, and Governance refers to non-financial information about how a firm deals with issues on this matter, and its importance for firm valuation is growing ([Bassen and Kovács 2008](#)). Even though ESG information might lack standardisation, scholars argue that it can help adapt to environmental changes and even be a part of a company's competitive strategy ([Galbreath 2013](#)).

As ESG scores are easy to access, it is often used as a proxy for corporate sustainability performance ([Drempetic et al. 2019](#)). To understand this connection, a breakdown of the term is necessary. The ESG score is often divided into three, where each company gets an individual score for environmental, social, and governance initiatives. The environmental disclosure score covers, e.g., CO<sub>2</sub> emissions and the total waste of a company. Furthermore, the social disclosure score measures equality, human rights, and labour conditions. Lastly, the governance disclosure score covers, among other things, shareholder rights and corruption. Overall, this makes up the total ESG disclosure score that several well-known databases offer, including ASSET4, SAM, Bloomberg, and Thomson Reuters Eikon™ ([Dorfleitner et al. 2015](#)).

## 3. ESG Disclosure

In addition, to emphasise companies' increasing focus on CSR, [Porter and Kramer \(2006\)](#) also discuss different methodologies to rank companies on their CSR performance. Companies now face an increasing set of disclosure requirements, and it is argued that companies use time and money to voluntarily disclose their initiatives ([Elmarzouky et al. 2021](#); [Gamerschlag et al. 2011](#)); however, [Han et al. \(2016\)](#) discuss the problem of biased disclosure when relying on the companies' own CSR reports and propose using third-party ratings to get an unbiased view. Furthermore, one of the main indexes within this field is the ESG disclosure score used in the research.

The problem of biased disclosure might disappear in the near future as the E.U. taxonomy for sustainable activities was presented on the 22 June 2020. This classification system aims to determine if a company and its activities are environmentally sustainable ([Lucarelli et al. 2020](#)) and might thus be the regulatory framework that the field needs.

## 4. Measures of Financial Performance

A variety of measures are used to calculate a company's performance, and profit is one of the central ones for many companies ([Waters 2011](#)). Prior literature that investigates the relationship between ESG scores and performance uses the following measures: Stock Returns (e.g., [Brammer et al. 2006](#)), Return on Assets (ROA) (e.g., [Xie et al. 2019](#)) and Return on Equity (ROE) (e.g., [Atan et al. 2018](#)). Although the research is slightly old, [Griffin and Mahon \(1997\)](#) reveal that 80 different performance measures have been used in their research (51 research studies). Out of these 80 measures, the most frequently used measures are firm size, ROE, and ROA.

[Velte \(2017\)](#) emphasises the importance of using market-based accounting measures as a proxy for financial performance, naming ROA as the most common accounting measure. He used this measure and Tobin's Q to conduct his research. The same two variables are also used by several others, such as [Atan et al. \(2018\)](#) and [Dalal and Thaker \(2019\)](#).

## 5. Past Findings

According to [Friede et al. \(2015\)](#) the first article researching the relationship between ESG and financial performance was done in early 1970. After this, several scholars have contributed to the literature (more than 2200 according to [Drempetic et al. 2019](#)). Furthermore, these scholars and professionals have used a diverse number of terms within the category of ESG; however, whether the term used is Socially Responsible Investing (SRI), Corporate Social Performance (CSP), or ESG, the studies measure more or less the same criteria in terms of assessing how being sustainable pays off.

### 5.1. The Positive Relation between ESG and Performance

Several scholars find that sustainability improves financial performance ([Barnett and Salomon 2006](#); [Peiris and Evans 2010](#); [Jo and Harjoto 2011](#) among others). **Table 1** outlines the literature on the positive association between ESG and firm's financial performance.

**Table 1.** Literature on the positive association between ESG and performance.

| Authors (Year)                             | ESG Measure                                   | Performance Measure   | Sample Period | Country                      | Findings              |
|--|---|---|---------------|------------------------------|-----------------------|
| <a href="#">Barnett and Salomon (2006)</a> | Cost of social responsibility                 | Risk-adjusted financial performance of a given SRI fund                             | 1972–2000     | USA                          | Positive Relationship |
| <a href="#">Peiris and Evans (2010)</a>    | ESG factors                                   | Return on assets and Market-to-book-value   | 1991–2006     | USA                          | Positive Relationship |
| <a href="#">Filbeck et al. (2009)</a>      | Business ethics samples                       | Market capitalization and Book value of Equity/Market value of equity (BE/ME) ratio | 2000–2007     | USA                          | Positive Relationship |
| <a href="#">Velte (2017)</a>               | ESG performance                               | Return on assets  | 2010–214      | Germany                      | Positive Relationship |
| <a href="#">Dalal and Thaker (2019)</a>    | Sustainability ratings by NSE 100 and indices | Return on assets  | 2015–2017     | India                        | Positive Relationship |
| <a href="#">Xie et al. (2019)</a>          | Bloomberg ESG disclosure score                | Corporate efficiency (revenue earned, ROA)  | 2015          | International (74 countries) | Positive Relationship |
| <a href="#">Lo and Sheu (2007)</a>         | Sustainability index (DJSI USA)               | Tobin's Q ratio   | 1999–2002     | USA                          | Positive Relationship |
| <a href="#">Lourenço et al. (2012)</a>     | Corporate sustainability performance          | The market value of equity  | 2007–2010     | Canada & USA                 | Positive Relationship |
| <a href="#">Derwall et al. (2005)</a>      | Eco-efficiency score                          | Stock price   | 1995–2003     | USA                          | Positive Relationship |

| Authors (Year)                     | ESG Measure           | Performance Measure  | Sample Period | Country | Findings              |
|------------------------------------|-----------------------|--|---------------|---------|-----------------------|
| <a href="#">Zhao et al. (2018)</a> | ESG performance index | ROCE as financial performance indicator & Debt to Equity ratio | 2017          | China   | Positive Relationship |

In 2003, Orlitzky, Schmidt and Rynes did a meta-analysis of 52 prior studies, covering most quantitative studies in the field until 2003. With a sample size of 33,878 observations, they found that environmental responsibility is “likely to pay off”.

[Filbeck et al. \(2009\)](#) conducted a study on “the 100 best Corporate citizens”, a list from 2000 to 2007. The list was first published in 1999, and it ranked the largest 1000 US companies on their ESG performance ([Corporate Responsibility Magazine 2019](#)). The findings suggest that the companies tested outperformed the S&P 500 index in the first years after testing. Using “return on assets” (ROA) and Tobin’s Q as measures, [Velte \(2017\)](#) also found that ESG impact the two measures positively. Furthermore, he found that governance strongly impacts financial performance. A recent study on 65 Indian companies from 2015 to 2017 proves that a high ESG score improves financial performance ([Dalal and Thaker 2019](#)). [Xie et al. \(2019\)](#) found mixed results, but concluded that the positive relationship between ESG activities and a company’s performance is not doubted.

A few studies measuring corporate sustainability should also be mentioned due to the close resemblance to ESG. When studying how Corporate Sustainability affects market value, [Lo and Sheu \(2007\)](#) found a significantly high correlation. They argue that the findings support the idea that being sustainable can increase firm value, and thus, higher financial performance. [Lourenço et al. \(2012\)](#) found the same results when studying corporate social performance (CSP); with being a member of the Dow Jones Sustainability Index as the proxy, CSP has strong explanatory power over the book value of equity and earnings.

Focusing on “eco-efficiency”, which is defined as the economic value created by a company about the waste produced, [Derwall et al. \(2005\)](#) present findings that an eco-efficient portfolio outperforms a less eco-efficient portfolio; however, they also question the possibility of measuring the impact of CSP on firm performance.

Other scholars that find a positive relationship between ESG and financial performance are [Friede et al. \(2015\)](#), [Zhao et al. \(2018\)](#), and [Doh et al. \(2009\)](#).

## 5.2. The Negative Relation between ESG and Performance

Another view is that investing in ESG negatively relates to financial performance. **Table 2** outlines the literature on the negative association between ESG and firm’s financial performance. [Brammer et al. \(2006\)](#) argued this by analysing many U.K. firms, using market returns as the measure. The analysis observed that firms with a CSP (corporate social performance) score of 0 outperform the market. [Barnett \(2007\)](#) argues that it is natural to assume that investing in CSP will be a disadvantage due to the reallocation of resources from the shareholders to other stakeholders.

**Table 2.** Literature on the negative association between ESG and performance.

| Authors (Year)                               | ESG Measure   | Performance Measure                      | Sample Period | Country                         | Findings              |
|--|---|--|---------------|---------------------------------|-----------------------|
| <a href="#">Brammer et al. (2006)</a>        | EIRIS scores  | Stock returns                            | 2002–2005     | The U.K.                        | Negative Relationship |
| <a href="#">Lee et al. (2009)</a>            | Dow Jones Sustainability Indexes  | ROA, ROE, and ROE                        | 1998–2002     | Multiple countries              | Negative Relationship |
| <a href="#">Nollet et al. (2016)</a>         | ESG disclosure score  | ROA and ROC                              | 2007–2011     | USA                             | Negative Relationship |
| <a href="#">Garcia and Orsato (2020)</a>     | Measured by ranging from 0% to 100%, based on information on governance, environmental, and social pillars of firms | ROA and DCF (free cash flow)             | 2007–2014     | Multiple countries (mainly USA) | Negative Relationship |
| <a href="#">Folger-Laronde et al. (2020)</a> | Eco-fund ratings are sourced from Corporate Knights, a research firm that provides R.I. ratings                     | Weekly financial returns during COVID-19 | 2019–2020     | Canada                          | Negative Relationship |

| Authors (Year)                  | ESG Measure  | Performance Measure                                     | Sample Period | Country | Findings              |
|---------------------------------|--|---|---------------|---------|-----------------------|
| <u>Mittal et al. (2008)</u>     | CSR disclosure   | Economic value added (EVA) and Market value added (MVA) | 2001–2005     | India   | Negative Relationship |
| <u>Crisóstomo et al. (2011)</u> | CSR index based on Ibase's information                                       | ROA and ROE   | 2001–2006     | Brazil  | Negative Relationship |
| <u>Velte (2017)</u>             | ESG performance data, collected from the Thomson Reuters Datastream database | ROA as financial performance                            | 2010–2014     | Germany | Negative Relationship |

Another study that found a negative correlation between ESG and performance is by Lee et al. (2009); however, they also emphasise the value of being sustainable and that investors often require lower returns for companies with higher ESG scores.

Nollet et al. (2016) used accounting- and market-based performance indicators to investigate the relationship between CSP and Corporate Financial Performance (CFP). Even though they found a significant negative relationship between CSP and one of the accounting-based indicators, they found evidence of CSP effects being positive in the long run. Furthermore, they found that the G (Governance) is the key driver affecting the relationship.

A recent study investigating the relationship in emerging countries finds that the dependent variables, “ROA” and “Free Cash Flow”, are negatively affected by ESG initiatives (Garcia and Orsato 2020). The researchers predicted this result due to the lack of capital in emerging countries and the necessity to prioritise its investments. Another relevant study conducted during the COVID-19 pandemic found that ESG was negatively related by financial returns due to the pandemic. (Folger-Laronde et al. 2020). Other research studies that find that ESG initiatives have a negative impact on firm value or performance are, e.g., Mittal et al. (2008), Crisóstomo et al. (2011), and Velte (2017).

### 5.3. Mixed Relation between ESG and Performance

The third group of scholars found mixed results when investigating the relationship between ESG and performance.

Brammer and Millington (2008) found that a company has higher financial performance, both when the level of corporate social performance (CSP) is unusually high and unusually low. Furthermore, they argue that companies with low CSP perform better in the short run, whereas companies with high CSP perform best in the long run.

Another research study with varied results is Han et al. (2016), who split the ESG score into individual Environmental, Social, and Governance scores. They found a positive relationship between governance and financial performance and a negative relationship with the environmental score. As for the social responsibility score, there was no relationship.

### 5.4. No Relation between ESG and Performance

Even though the abovementioned studies present both positive and negative correlations between ESG initiatives and performance, some studies find no correlation between the two (Atan et al. 2018; Galema et al. 2008; Humphrey et al. 2012a).

Humphrey et al. (2012b) conducted a study on 249 UK firms, and by separating E, S, and G, they explored the independent effects on performance. Even though they concluded that there is no significant cost (in terms of risk or return) when investing in ESG, they also found no benefit. In other words, there is no difference in performance between a company with a low ESG ranking and a company scoring highly.

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