

# Does Sustainability Transparency Pay?

## Abstract

The effect of sustainability on financial indicators has been widely studied. However, little has been researched regarding the relationship between sustainability transparency and firms' financial performance. Sustainability transparency help reduce asymmetry of information among stakeholders and managers on sustainability strategies and performance, which can benefit firms to get access to capital markets and secure their license to operate. Moreover, strong and strategic ESG performance leads to preferential treatment from investors compared to companies whose environmental or other practices may pose a greater financial risk. Thus, clearly communicating how the firm's purpose is aligned to the ESG performance is crucial. Therefore, we hypothesize firms with higher scores on ESG transparency would achieve higher returns. We use Bloomberg's ESG Disclosure Score as a measure of sustainability transparency. We ran a fixed effects regression on R and confirmed our hypothesis. We believe the reason for that strong and strategic ESG performance leads to preferential treatment from investors compared to companies whose environmental or other practices may pose a greater financial risk. Thus, clearly communicating how the firm's purpose is aligned to the ESG performance is crucial.

**Key-words:** Sustainability, transparency, ESG, financial performance.

## 1. Introduction

Individual shareholders, institutional investors, governments, local communities, employees, clients, and suppliers of have been pressuring organizations to develop strategies on issues related to the environment, society, and governance (ESG). This business logic, of business sustainability, is not new to academia or practitioners, however, interest increased exponentially over the past 10 years due to several opportunities and risks organizations face. The integration of sustainability issues in business strategy started to happen as the global competition increased in the 1990s when capitalism was being redefined as capable of meeting the world's needs and compatible with resource efficiency, innovation, profits, image and enhanced value for organizations (Hart & Milstein, 2003; Kramer & Porter, 2011). Thus, the link is that sustainability-oriented strategies can create multiple types of long-term wealth for society at large and outperform conventional firms on financial performance (Claro & Esteves, 2021).

Authors have been studying the relationship between firms' sustainability and financial performance (Friede, Busch & Bassen, 2015; Buallay, 2019; Auer & Schuhmacher, 2016; Rivoli, 2003; Schröder, 2007; Lean, And & Smyth, 2015; Brzezczynski & McIntosh, 2013; Awaysheh et al., 2020). Results vary, from positive to negative, and neutral effect depending on the type of methodology and data used. Overall, most results show positive effects of sustainable strategies on firm value. On the other hand, few studies seek to understand the effect of sustainability transparency on firms' financial performance (Eccles, Serafeim & Krzus, 2011; Akhigbe, McNulty & Stevenson, 2013; Li et al., 2018; Wang et al., 2020; Papoutsis & Sodhi, 2020).

Although stakeholders, in general, have been demanding that firms show their commitment and attitudes related to sustainability, investors in particular, have been pressuring for more strategies and disclosure of non-financial information such as ESG (Eccles, Serafeim

& Krzus, 2011). Larry Fink, the CEO and Chairman of BlackRock, the world's largest investment management firm, has sent out annual letters since 2012 to CEOs of the organizations that BlackRock invests in on behalf of its clients. The letters are seen as a bellwether of the expectations that the finance industry and wider society have on business and its role in society. The 2021's letter includes the need for a huge toward net-zero carbon emissions, the interconnectedness of social and environmental issues, the importance of solid data, and the maturing link between sustainability and corporate performance (GlobeScan, 2021). In other words, sustainability and transparency are in high demand. Thus, our study aims to expand the discussion about the effect of sustainability transparency on financial performance. We hypothesize that sustainability transparency leads to higher returns.

To measure sustainability transparency, we will use Bloomberg's *ESG Disclosure Score*. It shows how concerned a firm is with disclosing sustainability performance, by grading the amount of ESG data a firm discloses. Additionally, to measure firms' financial performance we use *Returns*, that shows the returns that an investment generates for capital contributors. To investigate this effect, we gathered data from 103 Brazilian companies from 2010 to 2019. We ran a fixed effects model on R and the results confirm our hypothesis that sustainability transparency improves firms' financial performance. Those results are especially important to firms that are willing to invest and improve the level of disclosure about ESG strategies and performance over time.

We have organized the rest of this paper in the following way. The next section discusses relevant literature on sustainability, disclosure and financial performance. In Section 3, section, we discuss the method and present the results. Section 4 concludes the paper with the main contributions.

## **2. Literature Review – Sustainability, Transparency and Performance**

Sustainability was first defined at the Brundtland Report, which stated that current generations should satisfy their social, environmental, and economical needs without compromising future generations' ability to meet their own (WCED, 1987). More recently, firms have been appointed by the United Nations as key actors for achieving sustainable development (UN, 2015). The role of firms in achieving sustainability has been widely discussed (Hart & Milstein, 2003; Kramer & Porter, 2011; Carroll, 2016).

The assumption regarding sustainability and performance is that a strong and strategic sustainability proposition correlates with higher equity returns. The positive relationship can be explained, for instance, by the fact that sustainability strategies can reduce firms' downside risk, by lowering loan and credit default swap spreads and increasing credit ratings. On the other hand, sustainability can help firms to decrease costs associated with pollution as well as increase revenues streams based on new markets for green products. Assumptions such as those are present in the overwhelming weight of accumulated research that concluded that firms that pay attention to environmental, social, and governance issues generate more value to shareholders (Claro & Claro, 2014; Friede, Busch & Bassen, 2015; Buallay, 2019; Auer & Schuhmacher, 2016; Rivoli, 2003; Schröder, 2007; Lean, And & Smyth, 2015; Brzezczński & McIntosh, 2013; Awaysheh et al., 2020). Most of these studies find a positive relationship between sustainability and financial indicators. Friede, Busch & Bassen (2015) conducted a meta-analysis with more than 2000 studies and showed that 90% of the studies found a positive relation between ESG and corporate financial performance. Buallay (2019) evaluated the impact of ESG on the performance of 235 banks. Results indicate a significant positive impact of ESG on performance. Other studies analyzed the impact of either sustainably responsible investment (SRI) or corporate social responsibility (CSR) on financial indicators. Awaysheh et

al. (2020) found that the best-in-class firms, in terms of CSR, outperform their industry peers in operating performance and have higher relative market valuations (Tobin's Q). Lean, And & Smyth (2015) found that SRI funds outperform the market benchmark in Europe and North America.

However, the literature is scarce on the effect of ESG transparency on firms' returns. For example, Li et al. (2018) found a positive relation between ESG disclosure level and firm value (Li et al., 2018). Since ESG disclosure is voluntary, it directly influences stakeholders' perception of firms' transparency (Li et al., 2018). In other words, the more information about sustainability a firm discloses, the more stakeholders perceive this firm as transparent, less risky and thus, that could add more financial value. These findings are also in line with results of Akhigbe, McNulty & Stevenson (2013) and of Wang and colleagues (2020). The last evaluated 289 Chinese listed firms and found that environmental information disclosure positively (directly) affects ROE (Wang et al., 2020).

The assumptions for exploring the positive relationship between ESG transparency and return can be explained by the fact that potential customers and employees may evaluate a company's impact on ESG based on the disclosed information, to decide if they want to work or consume from them. Non-governmental organizations (NGOs) are also pressuring for more information and uncovering firms' performance on ESG issues such as Greenhouse Gas (GHG) emissions, diversity, poverty, human rights considering the supply chain. These organizations are publicly discrediting poor performers, especially firms who does not have public commitments and limited transparency. More importantly, investors' screens for investment consider a firms' impact in ESG, along with its long-term risks, opportunities and financial performance. These are in line with the Signaling theory that discusses how firms address information asymmetry through communicating with stakeholders who cannot otherwise be directly aware about how firms expend resources and create value (Clarkson, et al., 2008). This is particularly necessary in relation to what a company may be doing concerning sustainability because corporate sustainability efforts and outcomes are not readily apparent to shareholders (Papoutsi & Sodhi, 2020). The idea is that sustainability transparency help reduce asymmetry of information among stakeholders and managers on sustainability strategies and performance, which can benefit firms to get access to capital markets and secure their license to operate.

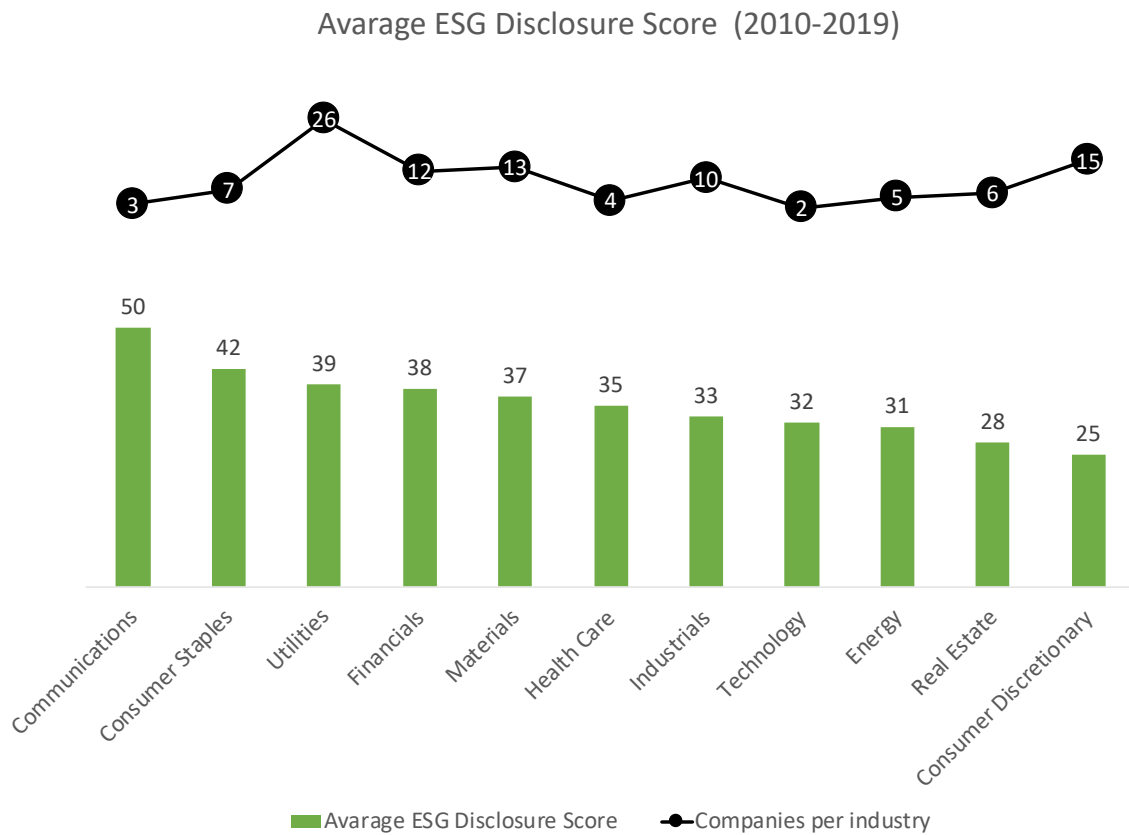
Therefore, the present study aims to contribute to the discussion by evaluating the relationship between ESG transparency and firms' returns. Our hypothesis is that firms with higher scores on ESG transparency would achieve higher returns.

### 3. Methodology

This paper investigates the relationship between sustainability transparency and financial performance. It focuses on public firms doing business in Brazil. For that purpose, we gathered data from Bloomberg of *Returns*, *ESG Disclosure Score*, *Assets* and *Industry* from 103 public Brazilian firms in the period of 2010 to 2019.

Figure 1 shows the number of companies per industry, using Bloomberg's Industry Classification System (BICS), and their average *ESG Disclosure Score*. We can see that the industries with the highest average *ESG Disclosure Score* are communications, consumer staples and utilities. Also, our sample of companies is mainly concentrated in the following industries: utilities, consumer discretionary and materials.

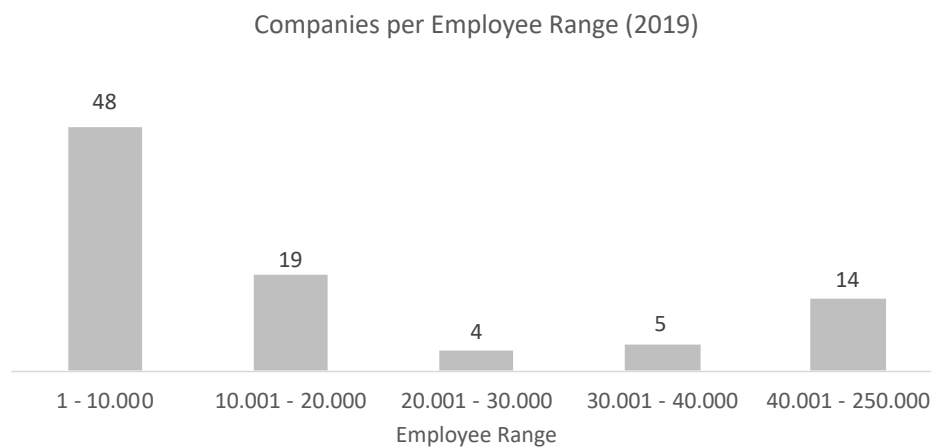
**Figure 1.** Average ESG Disclosure Score by Industry



Source: developed by authors.

To further explore our sample, Figure 2 shows the number of companies per employee range in 2019. We can see that most of our sample has less than 10,000 employees. Also, for 13 of the companies, we didn't have the number of employees in 2019 available on Bloomberg.

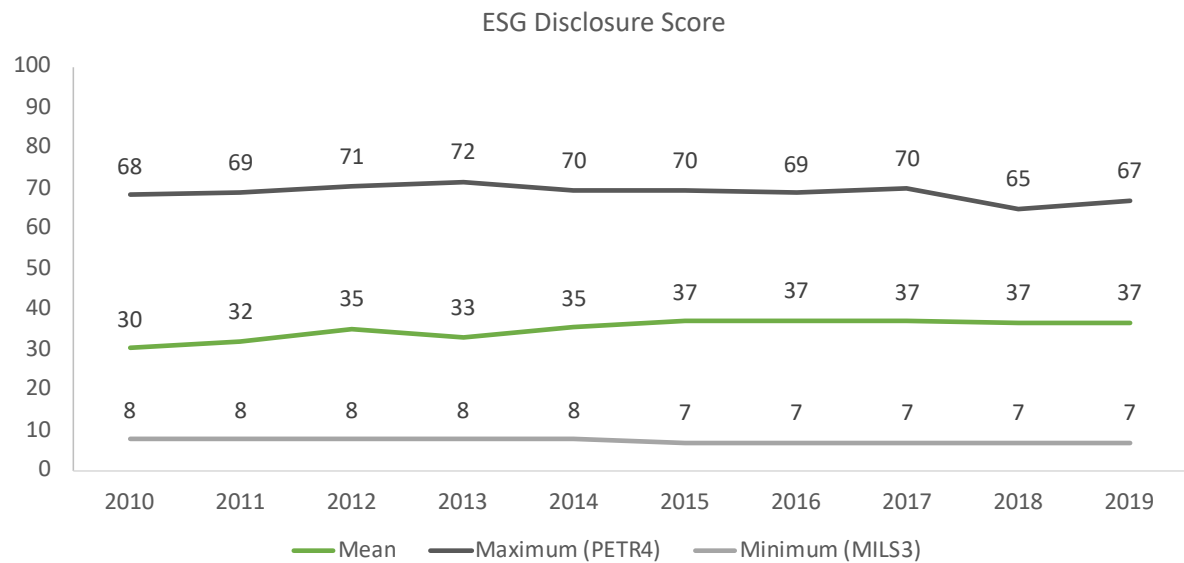
**Figure 2.** Companies per employee range



Source: developed by authors.

The main explanatory variable is *ESG Disclosure Score*. It is a Proprietary Bloomberg score from 0.1 to 100 based on Environmental, Social, and Governance (ESG) disclosure. Each ESG component (environmental, social, and governance) is equally weighted in the calculation of Bloomberg's score. Most ESG disclosure is voluntary, as such, it's perceived by firms' stakeholders as a sign of transparency. Figure 3 shows how this score behaves over time. We can see that, for Brazilian companies, in the period studied, *ESG Disclosure Score* ranges from around 7.5 to around 69. Also, the average score rose from 2010 until 2015 and become stable from 2015 until 2019. The company with the lowest *ESG Disclosure Score* in our sample is "Mills Estruturas", from industrial support services, and the one with the greatest is "Petrobras", an oil & gas producer.

**Figure 3.** ESG Disclosure Score over time.

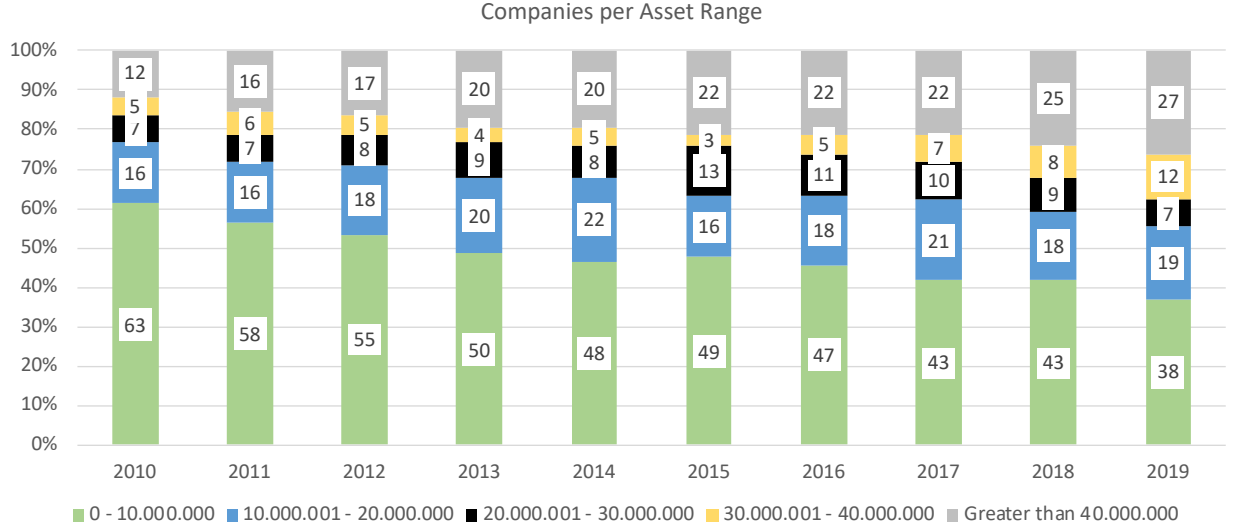


Source: developed by the author.

The dependent variable of the model is *Returns*, it shows the returns that an investment generates for capital contributors, in percentage. Additionally, as the authors have been doing, we use the logarithm of firms' *Assets* as a control variable to measure the firm size (Velte, 2017; Buallay, 2019). It's relevant to include this variable because bigger firms often have economies of scale or scope, that are valuable, rare, difficult to imitate, and explored by the organizations, therefore, they represent competitive advantages (Barney, 1991).

Figure 4 shows the number of companies per assets range from 2010 to 2019. We can see that in 2010 more than 60% of the firms had less than 10.000.000 in assets and this proportion fell over time, which means that companies were increasing in size. In 2019, over 25% of the companies had more than 40.000.000 in assets.

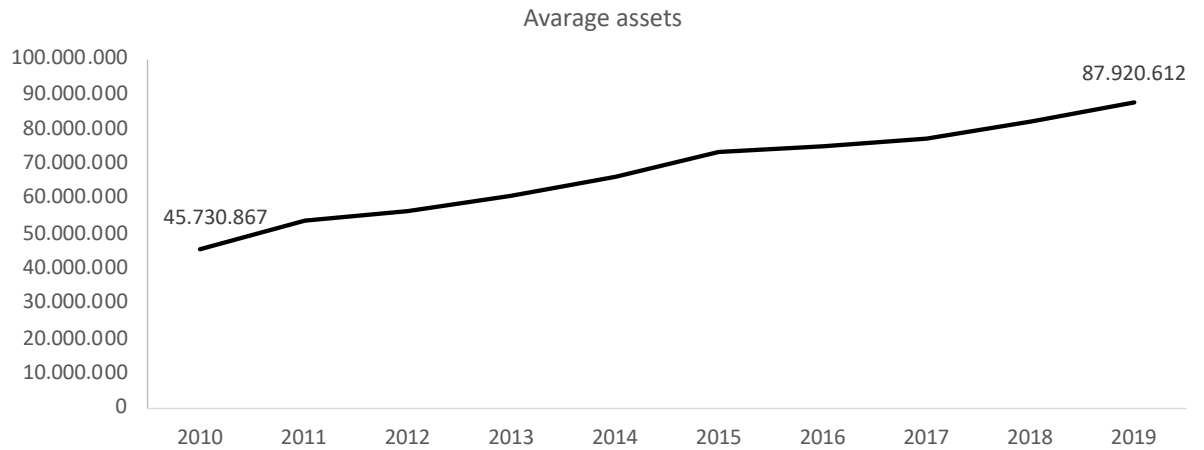
**Figure 4.** Companies per asset range (2010-2019)



Source: developed by authors

In order to deepen our understanding of firm size, we constructed Figure 5, that shows the average assets through time. We can see that firm size increased in the period, as average assets rose from 45.730.867 in 2010 to 87.920.612.

**Figure 5.** Average assets (2010-2019)



Source: developed by authors.

We ran the following fixed effects regression, using the software R, between *Returns* and the *ESG Disclosure Score*, controlling for firm size ( $\log(\text{Assets})$ ) and industry (dummy variables  $I1$  to  $I10$ ):

$$\begin{aligned}
 \text{Returns}_{i,t} = & \beta_1 \text{ESG}_{i,t} + \beta_2 \log(\text{Assets})_{i,t} + \beta_3 I1_{i,t} + \beta_4 I2_{i,t} + \beta_5 I3_{i,t} + \beta_6 I4_{i,t} + \beta_7 I5_{i,t} \\
 & + \beta_8 I6_{i,t} + \beta_9 I7_{i,t} + \beta_{10} I8_{i,t} + \beta_{11} I9_{i,t} + \beta_{12} I10_{i,t} + \varepsilon_i + U_t
 \end{aligned}$$

#### 4. Results and Conclusion

The results of the fixed effects regression are shown in Table 1. Consistent with our hypothesis, we can see that *ESG Disclosure Score* has a positive (1.61) and significant (p-value of 0.06) effect on Returns. More specifically, a 1 point increase in *ESG Disclosure Score* will lead to a 1.61 percentage points increase in *Returns*.

**Table 1.** Fixed effects regression results

Variable	Coefficient (p-value)
ESG	1.6056* (0.0643)
log(Assets)	71.3212* (0.00000000003)
Consumer Discretionary (I1)	199.1573* (0.0330)
Consumer Staples (I2)	70.7780 (0.4700)
Energy (I3)	-2.3285 (0.9824)
Financials (I4)	-33.9892 (0.7149)
Health Care (I5)	254.0700* (0.0234)
Industrials (I6)	156.1537 (0.1050)
Materials (I7)	-228.5703* (0.0131)
Real Estate (I8)	146.2362 (0.1558)
Technology (I9)	430.1166* (0.0010)
Utilities (I10)	140.4135 (0.1109)
F-statistic (p-value)	11.0128* (0.0000000000000002)

\*Significant at  $p < 0.10$ .

Source: developed by authors

The role of firms in helping achieve a more sustainable world will continue to be a matter of substantial interest in academia and between practitioners. The United Nations appointed firms as important actors in moving towards sustainability (UN, 2015). Within the business arena, sustainability is an approach to create long-term value by taking into consideration how a given organization operates in the ecological, social and economic

environments. Sustainability is built on the assumption that developing such strategies foster company longevity. A key argument for engaging firms is showing that sustainability also leads to better financial results. This research contributes to this agenda by understanding the impact of sustainability transparency on firms' returns.

Our main conclusion is that sustainability transparency pays because it leads to greater returns. Studying 103 public Brazilian firms, by running a fixed effects regression, we found that firms with higher *ESG Disclosure Scores* have higher returns, in line with previous studies (Akhigbe, McNulty & Stevenson, 2013). We believe the reason for that strong and strategic ESG performance leads to preferential treatment from investors compared to companies whose environmental or other practices may pose a greater financial risk. Thus, clearly communicating how the firm's purpose is aligned to the ESG performance is crucial.

## **5. Managerial Implications and Research Agenda**

Although sustainability has taken a definitive place in business agenda, we must recognize that some decision makers still believe sustainability is a burden, a cost. In that direction, our results show that the investment in sustainability strategies and, specially, transparency, may have not only positive impact on sustainable development but also on corporate performance. As the expectations on corporate sustainability increase, and as transparency becomes more prevalent, firms are recognizing the need to act on sustainability. Professional communications and good intentions are no longer enough. The only way firms can accomplish transparency is through open communications with all key stakeholders built on high levels of information disclosure, clarity, and accuracy, as well as a disposition to recognizing problems and the need to improve practices.

Further research could go in three directions regarding methods. First, other financial performance indicators could be used as dependent variables, this could show that the financial impact can be even greater. Second, it should try to test different control variables. Third, it could replicate this study in other countries with other sustainability cultures, understanding how the environment plays a role in this discussion. Additionally, an interesting and important research agenda would be to understand the financial consequences of failing to act on sustainability. As many countries have been implementing regulations, such as carbons taxes, and the financial and banking sectors have integrated ESG in their ratings and credit evaluation, exclusion from de capital markets and poor lending conditions could have negative impact financial performance. On the other hand, access to new segments and markets might fail.

Our upcoming research will depart from this first quantitative study in order to deepen our knowledge about the preferences of investors. We want to learn if and why investors may treat firms differently based on the way they communicate their purpose and ESG performance.



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