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Corporate Social Responsibility and Country Governance: An International Comparative Study Amid the COVID-19 Pandemic

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Abstract: This paper assesses the association of ESG scores with stock returns and highlights the moderating role of the COVID-19 pandemic and the country's governance. The study uses panel data regression models to assess the relationship between ESG factors and stock returns, focusing on the moderating role of country governance and the COVID-19 pandemic. The results reveal that governance quality significantly enhances the positive effects of ESG practices on returns, particularly during times of crisis. These suggest that higher overall ESG scores are related positively to financial performance, and this relation is enhanced during the COVID-19 pandemic. Specifically, the two dimensions of ESG that matter most are environmental and governance. Country-level governance is important because firms in well-governed countries amplify the benefits of high ESG scores. The opposite is true for the higher controversies scores, whose bad financial outcome is magnified during the pandemic. These results present an argument for the resilience of firm financial performance, dependent on strong ESG practices and governance frameworks. This holds great interest for investors and policymakers in associating good ESG considerations with the effective management of financial risks, leading to sustainable returns during periods of widespread economic uncertainty.

Keywords: ESG; CSR; accounting; COVID-19; country governance; Europe; non-Europe; controversies

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1. Introduction

Corporate social responsibility (CSR) has increased the demand for higher quantity and quality of ESG (Environmental, Social, and Governance) information among users (Pedersen et al. 2021). These users include internal stakeholders, such as management, shareholders, and internal auditors, as well as external stakeholders, such as external auditors, banks, and customers. ESG-related assets under management are projected to reach around $33.9 trillion by 2026 (PwC 2022), with the European market expected to surpass the US. This underscores Europe's emphasis on this market and ESG information. The significance of ESG is further evident in the rising value of ESG Exchange ESG-traded funds (ESG-ETFs), reaching $449.5 billion. There is a growing demand for these ETFs, as 52% of millennials are willing to increase their ESG-related asset weights in their portfolio. Furthermore, ESG disclosures are now considered mainstream company reporting requirements by the Securities Exchange Commission (SEC). The importance of ESG is also highlighted by the "Greenwashing or ESG-washing" phenomenon, where companies attempt to portray their operations as more ESG-friendly than they truly are. Beyond stakeholder theory, which forms the backbone of this study, other well-known theories such as Agency Theory and the Resource-Based View (RBV) offer deeper insights into how ESG practices impact companies. Agency Theory suggests that good governance aligns the interests of managers and stakeholders, reducing the risks of mismanagement. Meanwhile, RBV highlights that firms with strong ESG scores build unique strengths, such

as a trusted brand and loyal customers, which can help them weather tough times, such as the COVID-19 pandemic.

The paper at hand aims to answer three crucial questions. It first examines the importance of ESG in predicting stock returns for both absolute and risk-adjusted returns. Second, it examines whether the COVID-19 pandemic altered the relationship between ESG and returns. Third, it examines the importance of country governance concerning return prediction under an ESG setting. CSR primarily focuses on social aspects of corporate responsibility, while ESG extends this framework by incorporating environmental and governance dimensions. This study emphasizes ESG due to its broader relevance to investor decision-making and firm performance.

The contributions of this work to the existing literature are quite a few. First, it complements that of (Asteriou et al. 2023), who explore the impact of ESG on returns within the Eurozone. Our research widens the analysis to include countries belonging to the Eurozone and non-Eurozone categories and makes the international comparison perspective even more comprehensive. We go even a step further by checking for the impact not only on stock returns but also for the moderating effect a crisis provides in this relationship between ESG factors and return to offer insight into how, in this case, a global crisis could influence the relevance of the ESG consideration. We also investigate the effect of the governance of countries on returns and how it interfaces with ESG factors. That is a huge step forward in understanding the interface between governance quality and ESG in return prediction. We finally assessed returns using absolute and risk-adjusted returns and, in multiple dimensions, gave an overall assessment of the predictability of returns.

The paper is organized as follows: Section 2 briefly reviews the related literature, specifying the main findings and gaps on which the present study is based. Section 3 describes the dataset under analysis and its sources and variables before processing. Section 4 presents the method, including emergent statistical techniques and empirical data analysis models. Section 5 details the empirical findings, explaining to what extent they support or disagree with the existing research and theoretical frameworks. Finally, Section 6 concludes with the main findings of the work and their implications for further study.

Understanding the relationship between CSR/ESG factors and stock returns is critical, particularly in economic crises such as the COVID-19 pandemic. During such crises, financial volatility tests the resilience of firms, and the presence of strong ESG practices may play a role in sustaining firm performance. This study fills a critical gap in the literature by exploring the role of ESG practices in enhancing stock returns during economic crises. This topic has yet to receive much attention. By incorporating country governance as a moderating factor, we provide novel insights into how external governance structures influence the financial outcomes of ESG initiatives.

2. Literature

Over the past few years, huge attention has been paid to the role of ESG information in the financial performance of companies; it is not only the information themselves that is critical but also how investors perceive the ESG profile of a company and how these views change over time with changing market conditions (Garefalakis et al. 2016; Zopounidis et al. 2020).

First, the existing literature has not been conclusive regarding whether firms with a higher ESG rating also achieve consistently higher expected returns (Cornell 2021). This ambiguity arises from the conflicting theoretical frameworks regarding the financial impact of CSR and ESG practices. While some theories suggest a positive relationship between strong ESG performance and financial returns, others question the consistency of this effect, particularly during economic uncertainty. (Cui and Docherty 2020; Pástor and Vorsatz 2020). Whether positive or negative, the market's response to ESG information can lead to a stock price overreaction. Differences among providers of ESG ratings can again create more risk associated with returns (Gibson Brandon et al. 2021).

The COVID-19 pandemic seems to amplify investor sensitivity to ESG-considerate companies (Pástor and Vorsatz 2020; Ragazou et al. 2022); however, the effect may be more intense in the corporate bond market than in the equity market (Singh 2022). These findings point toward a nuanced influence of ESG factors on financial performance, dependent on market segment and investor sentiment. Modern financial analysis is now key to integrating corporate social responsibility (CSR) and ESG considerations with respective interests arising from internal management to shareholders, other auditors, banks, customers, regulators, and policymakers. Future projections made by PwC estimate ESG assets under management at $33.9 trillion by 2026 (2022). Europe accounts for this trajectory in growth better than the U.S. This trend shows that ESG issues are increasingly important criteria in investment decisions and corporate transparency.

Many studies have hitherto focused on the adverse impact of ESG controversies on firm performance or ESG factors during stable economic periods (Cui and Docherty 2020; DasGupta 2022; Karagiannopoulou et al. 2023; Nirino et al. 2021; Passas et al. 2022; Xue et al. 2023) while our study contributes to the literature by examining how ESG practices interact with governance during a crisis, such as COVID-19. This comparison highlights the unique resilience of firms with strong ESG scores under adverse conditions. Controversy occurs when an event brings a bad reputation to a company. These include environmental spills, human rights violations, and governance scandals. Most of them result in severe financial penalties, legal costs, and the loss of consumer trust, which in turn activates negative stock returns and beats up volatility. As evidence, (Chen et al. 2022) found that airlines facing more ESG controversies suffered significantly larger declines in their stock price when impacted by the COVID-19 pandemic, with the impacts being further amplified during a crisis period. Furthermore, they may attract severe scrutiny and interest from regulators and investors, giving even greater financial implications. Consequently, managing ESG controversies is key to upholding financial stability and investor confidence.

Despite this growing emphasis on ESG, empirical evidence still varies, considering the direct impact on stock returns. The relevant literature about this topic is mixed: there is some evidence for a negative relation between ESG ratings and expected returns, while other studies find no significant relation (Berg et al. 2022; Champagne et al. 2022; Christensen et al. 2022; Crifo et al. 2017; Eng et al. 2022; Folger-Laronde et al. 2022). This discrepancy highlights the importance of the investor's scan and reaction to the ESG information. This can never be static, as it constantly changes depending on the market's status. Overreactions to the ESG news in the market have a very extensive effect on stock prices (Chen et al. 2022; Gibson Brandon et al. 2021). They add volatility and risk (Cui and Docherty 2020). In addition, disparities among these ESG rating providers can increase the risks outlined in the paper by (Gibson Brandon et al. 2021). The relationship with stock returns became even murkier with the COVID-19 pandemic. Pastor and Vorsatz show that the pandemic hiked investor sensibility to ESG, favoring companies with stronger ESG credentials (2020). That being said, heightened sensibility may be an issue more for corporate bonds than with equity.

According to (Gao and Geng 2024), in performed checking, there is no significant effect of the pandemic on the relationship between ESG and returns from where it could be adequately inferred that the status of COVID-19 concerning this phenomenon remains indefinite.

Also, the WGI (Worldwide Governance Indicators) reflects world governance in ESG stock return performance (Kraay et al. 2010). Good governance practices will increase corporate operations' transparency and raise investor confidence and financial results. The present study is meant to further develop the previous work of (Asteriou et al. 2023) in their analysis by integrating governance metrics in Eurozone and non-Eurozone countries to improve the analysis of the ESG factors. Such a wide approach would try to explain how the quality of governance influences ESG factors in determining stock returns, either in good economic times or in times of crisis. In this aspect, the current study contributes to these areas in that it looks at the significance of ESG in predicting stock returns with

both absolute and risk-adjusted returns considered and further evaluates the impact of the COVID-19 pandemic on the relationship. The current study provides insights into how a global crisis, with all its attributes of uncertainty and shocks, moderates ESG-return relationships and their interaction with governance quality by presenting comparative results between the Eurozone and non-Eurozone countries. The derived results from the study, therefore, intend to fill in the empirical voids in the literature related to the interplay between ESG, country governance, and stock returns, more so in a COVID-19 period. These findings are expected to be relevant to investors and policymakers because they assist in navigating the financial complexities characteristic of global financial markets during uncertain times. The theoretical foundation of this study is based on stakeholder theory, which posits that firms with strong CSR and ESG practices can create long-term value by addressing the needs of various stakeholders. This value creation is further moderated by governance structures that enhance transparency and accountability. Agency Theory posits that good governance aligns the interests of managers and stakeholders, mitigating risks and ensuring accountability. The Resource-Based View (RBV) tells us that companies with good ESG practices develop special assets, such as strong reputations, that give them an edge, especially when the economy is unstable. Similarly, Legitimacy Theory suggests that strong ESG efforts make companies more trustworthy, which is crucial when public trust is tested, such as during the pandemic.

3. Data

Academic research on ESG investing has increased in recent years, predominantly due to more data availability and the rising importance of ESG factors. A large pool of initial empirical research studies used the dataset heavily used by Kinder, Lyndenberg, and Domini (KLD) (Sharfman 1996), which established this so-called benchmark standard measure of Corporate Social Policy in academic literature. However, (Crane et al. 2017) criticized this dataset on several grounds—the inaccuracy and subjectivity of the weighting system and data aggregation into a single score. For our study, the information is taken from Refinitiv Reuters to keep quality and coverage in most of the information, mainly in the ESG scores (Table A1) based on 16 different factors. Data provided are annual and cover the period from 1 January 2012 to 31 December 2022 in this study. Within this period, the most significant events at the international level are of great importance, such as the outbreak of the pandemic caused by COVID-19, which—in this research—is delimitated from January 2020 to March 2021. One interesting feature of the Reuters Eikon methodology is that it rates companies not only on an absolute basis but also on a relative basis compared to their peers for a given ESG score. Countries were selected based on their governance diversity, which allows for a comparative analysis of how governance quality affects the financial benefits of ESG practices. The inclusion of both developed and emerging markets helps provide a more comprehensive understanding of these dynamics. The overall score for ESG that a company receives is the simple weighted average of the scores on its environmental, social, and governance pillars. Note that these scores are continuously assessed and may be revised higher or lower based on new flow from the financial press that pertains to a company. Plain returns refer to simple stock price appreciation; absolute returns include price appreciation and dividends; and risk-adjusted returns adjust for market risk by incorporating volatility into the performance assessment.

Missing data were handled using multiple imputation techniques, and outliers were identified based on standardized residuals greater than three standard deviations from the mean. We addressed data inaccuracies by applying robust regression techniques.

3.1. Variables

The following primary variables are in the dataset:

1. **Returns:** These consist of plain returns, absolute returns, and risk-adjusted returns. Regarding financial performance, all three kinds of returns provide slightly different aspects of the same.

2. **ESG scores**: ESG scores provide a composite measurement of companies' environmental, social, and governance performance. Such scores, in turn, are derived from multiple indicators:
    - **Environmental pillar score (EPS)** consolidates the resource use, emissions, and innovation sub-scores.
    - **Social pillar score (SPS)** includes sub-scores for workforce, human rights, community, and product responsibility.
    - **The governance pillar score (GPS)** includes the company's subs scores in management, shareholders, CSR strategy, and cont.
3. **Country governance scores**: This is also a derivative of the WGI. The following six dimensions are used in developing the governance scores: Voice and Accountability, Political Stability and Absence of Violence/Terrorism, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption.

3.2. Sample

The final dataset consists of 201 firms, with seven from each of the countries listed above, except for the United Kingdom, which is represented by only six firms. Also, four non-European countries are included in the dataset: Brazil, Canada, Singapore, and the United States. European firms were chosen due to the region's established ESG regulatory framework and leadership in sustainable finance. Additionally, Brazil, Canada, Singapore, and the U.S. were included to represent a diverse set of governance structures and economic contexts, which allows us to assess the influence of governance on the ESG-return relationship. Portfolio companies have been classified based on their ESG scores, which makes some analysis possible to be presented in detail. Companies are classified as low, middle, and high ESG-score portfolios.

- **Low** (1 to 3): Represented as D− to D+
- **Middle** (4 to 9): Such as a C− to B
- **High** (10 to 12): A− to A+

In addition, companies are categorized as **low** and **high** ESG based on a cyclically changing percentage of companies for each class of ESG score.

Methodology A portfolio framework is used in the analysis concerning the effects of ESG and COVID-19 on returns. These portfolios can incorporate weights based on ESG scores, resulting in three clear groups: ESG_low, ESG_median, and ESG_high, relating to the different ESG scores available in varied dimensions. This model makes it possible to examine how diverse ESG scores and the COVID-19 pandemic are combined to affect the stock returns, which are under consideration from varied countries. This rich dataset is a good basis for investigating the interplay of ESG, country governance, and stock return dynamics under economic regularity and crisis. We use multiple forms of measured returns and broad scopes of geographic coverage, ensuring this work's generalizability and wide applicability. The classification of portfolios in either low or high concerns different percentages of companies for each ESG score (Table A4).

4. Methodology

We employed four models to answer our research questions according to (Asteriou et al. 2023). The first two answer about the joint importance of ESG and COVID-19, while the other two explore the combined effects of ESG and country governance on financial performance. The independent variables in these models include overall ESG scores and individual pillar scores (Environmental, Social, and Governance), while the moderating variables include the COVID-19 period dummy and governance quality indicators. The choice of factors in these models is grounded in their relevance to the financial performance of firms. ESG scores have been widely recognized as key corporate sustainability indicators, while governance quality provides an external regulatory environment that influences the financial impact of ESG practices. Macroeconomic variables such as GDP growth and

inflation rates are included as control variables, accounting for broader economic conditions that may affect stock returns. The importance of ESG in return prediction is related to the importance of each ESG pillar. This is because investors value each pillar differently. Based on institutional investors that make up the biggest part of the market, they emphasize more in the environmental pillar (44%), the governance pillar (31%), and the social pillar (25%) (Capital Group 2023). This is why we provide results for the overall ESG score (total and combined) and for each pillar. We measure returns as either absolute or risk-adjusted returns for robustness (Asteriou et al. 2023). The models include control variables such as GDP growth, inflation rates, and industry dummies. These variables were chosen based on their relevance to stock performance and to account for macroeconomic and sector-specific factors that may affect returns.

4.1. Panel Data Regressions

The impact of ESG and COVID-19 on returns was assessed in a portfolio framework. Three ESG score-weighted portfolios were created. The ESG_low, ESG_median, and ESG_high refer to the inclusion of companies with ESG scores: (a) from 1 to 3 inclusive, (b) from 4 to 9 inclusive, and (c) from 10 to 12 inclusive, respectively. These portfolios were created for each country and across all countries. Three-panel regression models answered such an impact.

Models (1), (2), and (3) try to explain the role of ESG and COVID-19 in return prediction (returns: absolute and risk-adjusted returns, respectively). All models were employed in versions without control variables. Models (4), (5), and (6) try to explain the importance of ESG and country governance in return prediction (returns: absolute and risk-adjusted returns, respectively). Even though (Bae et al. 2021) found no impact of the pandemic on the relationship between ESG and returns, we believe COVID-19 can reduce endogeneity as an exogenous increase in the demand for companies with ESG scores.

Model (1)

$$Ri,t = \alpha 1 + \alpha 2 \cdot \text{Covid}t + \alpha 3 \cdot \text{ESGLow}i,t + \alpha 4 \cdot (\text{ESGLow}t \times \text{Covid}t) + \alpha 5 \cdot \text{ESGHigh}t + \alpha 6 \cdot (\text{ESGHigh}t \times \text{Covid}t) + ut \quad (1)$$

Model (2)

$$\text{Rabs},i,t = \beta 1 + \beta 2 \cdot \text{Covid}t + \beta 3 \cdot \text{ESGLow}i,t + \beta 4 \cdot (\text{ESGLowt} \times \text{Covid}t) + \beta 5 \cdot \text{ESGHigh}t + \beta 6 \cdot (\text{ESGHigh}t \times \text{Covid}t) + ut \quad (2)$$

Models (2) and (3) are similar to Model (1) as they try to explain the joint role of ESG, COVID-19, and ESG change in return, absolute return (Rabs, it), and risk-adjusted return (Radj,i,t) predictability. ESG_low refers to a dummy variable with a value of 1 for companies with ESG scores from 1 up to 4, inclusive. ESG_high refers to a dummy variable with a value of 1 for companies with ESG scores from 10 to 12 inclusive.

Model (3)

$$\text{Radj},i,t = \gamma 1 + \gamma 2 \cdot \text{Covid}t + \gamma 3 \cdot \text{ESGLow}i,t + \gamma 4 \cdot (\text{ESGLow}t \times \text{Covid}t) + \gamma 5 \cdot \text{ESGHigh}t + \gamma 6 \cdot (\text{ESGHigh}t \times \text{Covid}t) + ut \quad (3)$$

4.2. ESG and Country Governance

The impact of ESG was also examined in cross-sectional regression models as we tried to assess the ESG and WGI (country governance) and COVID importance in returns. The previous sub-sections portfolio framework was employed here as well.

Models (4), (5), and (6) explain the joint importance of ESG and country governance in returns, absolute and risk-adjusted returns, respectively. This endogeneity was also targeted with the use of a tri-variate variable of ESG (Δ, with the ith value of -1 when any ESG score decreases, 0 when there is no change, and +1 when the score increases. Models (5) and (6) are

similar to Model (4) as they try to explain the joint role of ESG, COVID-19, and ESG change in return (Rit), absolute return (Rabs, it), and risk-adjusted return (Radj,i,t) predictability.

Model (4)

$$\begin{aligned} R_{i,t} = {} & \delta 1 + \delta 2 \cdot Covid_t + \delta 3 \cdot \Delta ESG_i + \delta 4 \cdot IndexLow_i + \delta 5 \cdot IndexHigh_i + \\ & \delta 6 \cdot WGIHigh_i + \delta 7 \cdot (IndexLow_i \times WGIHigh_i) + \delta 8 \cdot (IndexHigh_i \times WGIHigh_i) \\ & + w_i \end{aligned} \quad (4)$$

Model (5)

$$\begin{aligned} abs_{,i,t} = {} & \varepsilon 1 + \varepsilon 2 \cdot Covid_t + \varepsilon 3 \cdot \Delta ESG_i + \varepsilon 4 \cdot IndexLow_i + \varepsilon 5 \cdot IndexHigh_i + \\ & \varepsilon 6 \cdot WGIHigh_i + \varepsilon 7 \cdot (IndexLow_i \times WGIHigh_i) + \varepsilon 8 \cdot (IndexHigh_i \times WGIHigh_i) \\ & + w_i \end{aligned} \quad (5)$$

Model (6)

$$\begin{aligned} R_{adj,i,t} = {} & \zeta 1 + \zeta 2 \cdot Covid_t + \zeta 3 \cdot \Delta ESG_i + \zeta 4 \cdot IndexLow_i + \zeta 5 \cdot IndexHigh_i + \\ & \zeta 6 \cdot WGIHigh_i + \zeta 7 \cdot (IndexLow_i \times WGIHigh_i) + \zeta 8 \cdot (IndexHigh_i \times WGIHigh_i) \\ & + e_i \end{aligned} \quad (6)$$

where,

Index_low refers to a dummy variable with a value of 1 for companies with ESG scores from 1 up to 4, inclusive.

Index_high refers to a dummy variable with a value of 1 for companies with ESG scores from 10 to 12 inclusive.

These refer to the ESG overall score (there are two: total and combined) or any pillar score (there are three: environmental, social, and governance); WGIHigh refers to a dummy variable equal to 1 if the firm's country has a high WGI score (above average score) or 0, otherwise. This WGI score was a weighted average across all WGI sub-scores (voice and accountability; political stability and absence of violence/terrorism; government effectiveness; regulatory quality; rule of law; and control of corruption).

To ensure the robustness of our models, we conducted tests for multicollinearity and heteroscedasticity. Furthermore, the stability of the models was assessed through time-series cross-validation, and the reliability of the regression estimates was confirmed using standard error adjustments.

5. Empirical Findings

5.1. Panel Data Regressions

The results for the joint importance of ESG and COVID-19 are reported for different classes of ESG: overall, environment, social, and governance (Section 5.1.1).

5.1.1. Returns

The results of panel data regression provided in (Appendix A) give a full view of the relationship of returns across all dimensions of the E and S scores—whether the overall ESG scores, the environmental score, the social pillar scores, the governance pillar scores, or the controversies scores.

Table A4 shows the results that, in general, ESG scores are positively related to the return. Companies with higher overall ESG scores tend to produce better stock performance. Our findings suggest that high ESG scores are associated with better financial performance in countries with strong governance frameworks. Specifically, the interaction between high ESG scores and robust country governance significantly enhances stock returns, highlighting the importance of governance quality in amplifying the financial benefits of ESG practices. In contrast, firms in poorly governed countries experience less significant

financial benefits from ESG practices, and in some cases, weak governance can negate the positive effects of high ESG scores.

These results suggest that government policies that strengthen governance structures—such as enhancing regulatory quality, rule of law, and control of corruption—can magnify the positive effects of ESG on financial performance. Firms operating in countries with good governance are better positioned to leverage their ESG practices for improved financial resilience, particularly during economic crises such as COVID-19. Businesses in these contexts should prioritize ESG practices, while governments should work to improve governance standards to ensure these practices deliver their full financial potential.

Exactly the same effect is highly significant during COVID-19, as the interaction effect between ESG scores and COVID-19 shows a lift on return. This suggests that companies with sufficient ESG practices were more resilient and better placed not to stand the shock emanating from the pandemic, hence leading to higher returns. Table A5 shows a positive relationship between environmental scores and returns. Companies with higher environmental scores, indicating better environmental practices, show increased financial returns. This relationship is even stronger in the COVID-19 period, with the high significance of the interaction terms. Such findings would underline the real role of environmental sustainability toward financial performances, particularly during crisis times, in which environmentally responsible firms kept or even increased their financial results during the pandemic.

The regression analysis conducted for Table A7 demonstrates that social pillar scores are positively correlated with returns. Companies with higher social scores, which mirror good social responsibility practices regarding respect for issues such as employee welfare and community engagement, tend to perform better financially. Most of the social drivers that achieved significance interacted with COVID-19. This means that firms with better social practices were better positioned to deal with the issues that resulted from the pandemic, eventually leading to better financial performance.

Table A8 demonstrates governance's robust positive coefficient with returns. Companies with better governance scores, reflecting strong governance structure and practice, earn back more financially. The interaction terms between the governance scores and COVID-19 are further positive coefficients but insignificant. These findings suggest that governance ensures financial stability and enhances shareholder returns, which is critical, especially in precarious times.

Lastly, in Table A9, the findings reveal that controversies scores are negatively related to returns. Companies with higher score signals of controversies experience a lower financial return, which indicates negative events or reputational issues. This negative impact is further exacerbated in COVID-19, as indicated by the significant interaction terms. The facts emphasize how heavy the financial risks of controversies are and how highly the penalty is raised during a crisis, thus underlining the significance of managing reputational risks toward safeguarding performances financially. In total, the results of the panel data regression for Tables A4–A8 summarily portray that strong ESG performance, mainly under the governance and environmental aspects, will lead to financial resiliency and performance, but controversies pose excessive risk, more so during periods of economic upheaval experienced with the COVID-19 pandemic.

5.1.2. Absolute Returns

Results about absolute returns and total ESG scores from the panel data regressions in Table A10 report a positive relationship with high ESG scores. In other words, high overall ESG scores will generally lead to—by and large—better financial performance. This suggests that amplifying this positive effect of the COVID-19 crisis would have made firms with stronger ESG practices more resilient. This affirms the findings' robustness, with the positive coefficients of statistically significant high ESG interaction with COVID-19. Results indicate the importance of the perceived economic benefits of strong performance in ESG, particularly when the economy becomes uncertain.

The same pattern is observed in Table A11 for the absolute returns and environmental (E) scores. Firms with a higher environmental score showed a stronger tendency toward absolute returns, which amplified even more during COVID-19. The positive and significant interaction terms between the environmental score and COVID-19 show that only a firm with a high level of environment-oriented business conduct will likely outperform during this spell of crisis. In this perspective, corporate environmental sustainability improves financial performance under crisis situations. The results for absolute returns and S scores in Table A12 show that more positive social scores are associated with a better absolute return. Companies with relatively stronger social performance, in terms of good workforce policy and community engagement, tend to show higher financial returns. Moreover, the interactions with COVID-19 were significant, indicating that social practices had become all the more necessary in a crisis such as the pandemic. This further highlights the social responsibility that drives financial performance, especially when society is backed into a corner.

Table A13 demonstrates that, for absolute returns and governance scores, the regression results confirm a strong relationship exists between better governance practices and improved absolute returns. Over and above, it emerges from the positive and significant coefficients associated with high governance scores and its interaction with COVID-19 that companies with higher governance scores had higher resilience and better financial performance during the pandemic. In this view, it can be deduced that good governance promotes financial stability and increased performance, especially in times of economic turbulence.

Lastly, Table A14 examines the relation to absolute returns and controversies scores. The results suggest an inverse relationship: a higher controversies score leads to, on average, a lower absolute return. During the COVID-19 period, this negative valuation effect is much stronger, as seen from the interaction terms. The fact that it sticks with such serious severity works to get finance's attention on the risks informed by concerns over reputations. Such results underline the importance of controlling and mitigating controversies associated with safeguarded financial performance, or at least those threatening severe firm damage in crisis situations.

5.1.3. Risk-Adjusted Returns

The risk-adjusted return panel data regressions provide further insights into the relationship between different ESG scores and financial performance under general economic conditions and crises.

The overall implication of Table A15 is that there is definitely a positive association between the ESG scores and risk-adjusted returns, whereby companies scoring higher in ESG usually reveal improved risk-adjusted financial outcomes. Both interaction terms with COVID-19 are significant, indicating that the positive effect of the ESG scores on the adjusted risk was stronger during the pandemic. This indicates a showing of resilience by companies with strong ESG orientations, which continued to demonstrate much better financial performance despite economic turbulence due to the pandemic. For instance, Table A16 reveals that with increased environmental scores, there are positive relationships to higher risk-adjusted returns. This strength in relationship extends into the COVID-19 period, as evidenced by the significant interaction terms. It suggests that companies endowed with strong environmental practices were better placed in risk cushioning for sustained financial performance during the crisis, clearly highlighting the importance of environmental sustainability in managing financial risks.

The results in Table A17 propose that social scores positively correlate with risk-adjusted returns. Firms with better social practices, such as employee relations and community engagement, will earn better risk-adjusted returns. The COVID-19 interaction terms are also significant, indicating that the prominence that social responsibility gained in driving financial performance was enhanced during the pandemic. This clearly illustrates the social factors that influence people's ability to build financial capacity during social and economic turmoil.

Risk-adjusted return and governance pillar (G) score, as shown in Table A18, it is observable that better governance scores are significantly associated with good risk-adjusted returns. This is supported by positive coefficients of high governance scores interacting with COVID-19: companies with good governance structures have a higher ability to manage risks and maintain financial performance in light of a pandemic. This clearly shows how good governance plays a key role in the sustainability of financial stability and realizing maximum risk-adjusted returns amid economic uncertainty.

Finally, as shown in Table A19, the results suggest that an increase in controversies scores is negatively related to risk-adjusted returns, where firms with higher controversies experience worse financial performance. Such impact is magnified during COVID-19, supported by the different significant interaction terms, which leads to higher financial penalties for companies following the crisis, while companies face high risks related to reputational issues. Managing controversies in protecting risk-adjusted returns becomes significant during crisis periods. In summary, the findings presented in these tables all point to the same conclusion: top ESG performance—especially in governance and environmental dimensions—strongly increases financial resilience and performance, whereas controversies significantly raise risks, particularly during economic shocks such as the COVID-19 crisis.

5.2. Cross-Sectional Regressions

The results for the combined importance of ESG, COVID, and country governance are reported for different categories of ESG: overall, environmental, social, and governance (Section 5.2.1).

5.2.1. Returns

Table A20 presents the results of the estimation of the panel data regression, which addresses the joint importance of the ESG scores, COVID-19, and country governance determinants in explaining returns. The results are sufficiently informative on how these variables work together to determine financial performance under varying regions and governance contexts. General findings showed that ESG scores, in general, have a positive impact on the total return: high ESG scores are associated with strong financial performance, and a quite significantly important congruent relation is found when the quality of country governance is also included—a significant interaction term between high ESG scores and high governance quality. Better governance frameworks among countries have positive effects on high ESG scores to return higher. Therefore, it puts emphasis on the supportive governance environment to extract higher financial benefits from ESG practices.

The beneficial high ESG scores effects on returns were maximally realized in this coronavirus pandemic period in countries with strong governance. This implies that companies with strong ESG practices and situated in well-governed countries are more resilient and better positioned to sail through the multifarious challenges that have emerged due to the pandemic. The very large and significant levels of the interaction terms between COVID-19 and high ESG scores indicate a stress test being faced by the pandemic but would expose strengths in companies with sound ESG credentials and good governance. On the other hand, low ESG scores are associated with low returns, but this is more pronounced, especially in countries with lower governance. The coefficients for the interaction terms of the indexes of low ESG scores and low governance quality are statistically significant, meaning that poor practices on ESG matters and weak governance systems worsen the already negative financial results. This indicates that compounded risks exist for these firms in less supportive governance environments, thus calling for strong ESG practice and governance to mitigate against the occurrence of financial risks. However, the bottom line of all these is the fact that ESG performance and country governance determine what returns are important. Firms with strong ESG credentials had an upsurge of positive returns across most asset classes, especially in well-governed countries, while firms with poor ESG practices saw their financial risks heighten, particularly in weak governance contexts. Turned around, the COVID-19 crisis has only made these dynamics more pronounced, with

robust ESG and governance practices now at the heart of ensuring financial resilience and performance in a crisis.

5.2.2. Absolute Returns

The results from Table A21 now constitute a discussion on the joint importance of ESG and COVID-19 events, along with country governance, as determinants for absolute returns. These effects portray an integrated view regarding how these variables operate jointly to influence firm financial performance across governance contexts both in stable periods and times of crises. In ESG, COVID-19, and country governance to absolute returns, it is noted that absolute returns have a positive relationship with the overall ESG scores. Firms with higher ESG scores show better financial performance. More precisely, the interaction terms of high ESG and high governance quality are very significant in high-quality governance countries.

In other words, financial leverage benefits from strong ESG practices really increase in the context of strong governance, which represents a positive synergistic effect of ESG with good governance upon better returns. The interaction terms find that a positive relationship between high ESG scores and absolute returns is magnified in good governance countries during the period of the COVID-19 pandemic. This means that companies with high ESG could be more resilient and maintain continued good financial performance under some crisis conditions, especially in well-governed countries. A significant coefficient for interaction demonstrates that high ESG practices are going to help firms achieve economic disruptions.

However, low ESG scores are associated with low absolute returns, especially in countries with weak governance. Significant interaction terms mean poor governance amplifies compounded financial risks when low ESG scores. Now, this lays bare the critical importance of strong ESG practices and governance to mitigate the incidence of adverse financial outcomes even more so, mainly during times of crisis. The discussion above and the corresponding results in Table A21 unveil the important role of ESG performance and country governance on absolute returns. Companies with good ESG practices benefit from improved absolute returns, especially in well-governed countries, while those with poor ESG practices face extreme financial risk, being in a poorly governed country. These two important dimensions were underscored by the COVID-19 pandemic in that, in an environment of economic uncertainties, strong ESG and governance practices work to support financial resilience as well as the performance of companies.

5.2.3. Risk-Adjusted Returns

Looking at Table A22, the panel data regression results explain how important ESG ratings, COVID-19, and country governance are in explaining variation over risk-adjusted returns. These results reveal how the stated factors collectively influence financial performance with regard to risk management and resilience during economic fluctuations. This means that ESG scores, in general, have a positive helpful effect on risk-adjusted returns, as firms that have high ESG performance tend to deliver better financial outcomes on a risk-adjusted basis. The effect is particularly strong in countries of high governance quality, as can be observed from the significant interaction between high ESG scores and high governance quality.

Those findings indicate that when firm risk is associated with good governance and ESG practices, combining both can promote this ability to handle risk, leading to improved financial stability.

Therefore, the ESG 1 portfolio shows a higher weight on firms with high ESG scores, whereas the ESG 2 portfolio has a higher weight on firms with low ESG scores. The positive impact of high ESG-scored firms on increasing risk-adjusted returns in countries with good governance during the COVID-19 pandemic is immense. The interaction terms are significant as a result, whereas the main effect of COVID-19 is negative, implying that the firms with exemplary ESG performance are more resilient and can weather the risks posed by pandemics, especially in environments that are well-regulated. That is fairly material to

ESG practices' role in supporting financial resilience at the peak of the crisis. In addition, countries with poor governance have a positive relationship with low ESG scores, which shows poor performance on a risk-adjusted basis. The large negative interaction between low ESG scores and low quality in governance shows that those firms with poor ESG practices are exposed to more financial risk and are least supportive of bad outcomes within less supportive governance environments.

This brings to the fore that risks such firms face get compounded, and therein lays an aspect of hard work in strong ESG practices and governance to help cover the adverse financial impacts. In general, the results in Table A22 emphasize that both ESG performance and country governance are of paramount importance with respect to risk-adjusted returns. As such, firms with good ESG credentials will enjoy high risk-adjusted returns in countries with good governance, while firms with weak governance countries will face severe financial risks. On the contrary, the unique characteristics relating to the COVID-19 pandemic served to amplify these dynamics relative to the role that strong ESG and governance practices play in ensuring financial stability and resilience during economic uncertainty.

6. Limitations

However, this study is broad and has some areas for improvement. First, the study was primarily conducted in European countries, while most of the non-European regions needed to be more represented, which limits the generalizability of the conclusions at the global level. This is a peculiar economic condition, not an atypical market condition, brought on by the pandemic. This could distort some of the relationships between ESG scores and financial performance that we are picking up. The third limitation is that reliance on Refinitiv Reuters data for the ESG scores ensures consistency and coverage across the largest number of companies. However, it may introduce biases that are components of its methodology and rating criteria. Moreover, the classification of firms into categories based on their ESG rating does not illuminate the rating change over time and, therefore, can miss out on any dynamic change in the level of ESG practice of firms. Finally, the emphasis on absolute and risk-adjusted returns relative to other dimensions of financial performance, including long-term growth and stability, should flag the need for more multidimensional financial metrics in future research.

7. Concluding Remarks and Future Research

The research delves into the intricate connection between ESG (Environmental, Social, and Governance) scores, country governance, and stock returns in the context of the COVID-19 pandemic. The study utilizes a comprehensive dataset spanning from 1 January 2012 to 31 December 2022 and encompasses various measures of stock returns, including plain, absolute, and risk-adjusted metrics. This expansive dataset allows for a robust analysis, shedding light on how ESG factors and governance quality influence financial performance in both stable economic conditions and times of crisis. While the dataset includes periods before and during the COVID-19 pandemic, the pandemic provides a critical stress test for assessing how ESG practices impact financial performance under crisis conditions. The findings reveal that companies with strong ESG practices were more resilient during the pandemic, thus affirming the importance of sustainable practices.

The findings underscore the significant role of ESG considerations in predicting stock returns, particularly in demonstrating a positive correlation between higher ESG scores and enhanced financial performance during the pandemic. This positive relationship is evident for overall ESG scores and individual environmental, social, and governance pillars. The research reveals that companies with strong ESG credentials have shown resilience amidst the uncertainties brought about by the COVID-19 crisis. From a managerial perspective, firms should focus on strengthening their ESG practices to improve financial resilience during crises. Policymakers should also prioritize governance reforms to create an environment where ESG investments can flourish, thereby enhancing both corporate performance and investor confidence. Specifically, firms with higher environmental and governance

scores exhibited greater stock returns, underscoring the importance of sustainability and robust corporate governance during turbulent times. Our findings show that companies with strong ESG practices, especially in the areas of governance and environmental responsibility, were more resilient during the COVID-19 pandemic. This supports the idea from Agency Theory that good governance reduces risks and improves financial outcomes. We also found that companies in countries with strong governance benefited even more from their ESG efforts, highlighting the importance of both corporate and national governance in navigating crises.

Moreover, the study emphasizes the pivotal role of good governance practices in enhancing corporate transparency, bolstering investor confidence, and ultimately improving financial performance. Additionally, the research highlights the differing impact of the COVID-19 outbreak on the relationship between ESG and stock returns across regions and ESG pillars. For instance, the study indicates that the growth-enhancing effect of high ESG scores on returns was more pronounced in European countries than in non-European nations, indicating regional disparities in investors' perception and valuation of ESG factors.

Overall, the study provides empirical evidence that ESG considerations are integral to financial performance, particularly in crisis scenarios. The implications of these findings are pertinent for investors, policymakers, and corporate managers. Integrating ESG factors into investment decisions can enhance portfolio resilience and performance, while policymakers and regulators should promote transparency and good governance practices to create a stable and appealing investment environment. Ultimately, corporate managers could elevate their overall financial performance and stakeholder trust by prioritizing ESG issues.

This research contributes to the growing body of literature examining the link between ESG and financial performance, emphasizing the importance of further exploration of these dynamics in diverse economic contexts and regions.

Another area that future research work could focus on is investigating whether the impacts of ESG performance on financial returns are equally longitudinal, covering effects not just during the time of the pandemic but also over time. Similarly, future studies would contribute to in-depth sectoral analysis of such impacts since a different sort of relationship between the ESG scores and financial performance across industries may exist. It would also be helpful to analyze in more detail the differential effects between each ESG pillar, that is, environmental, social, and governance. This would provide nuanced insights into which among them is actually responsible for driving financial performance most strongly. Second, it might become much more interesting to drill down into the interaction between the ESG performance and other major macroeconomic factors, such as, for instance, economic cycles or geopolitical events, in understanding an even broader context of these relationships. Finally, allowing the geographic scope to also include emerging markets would provide a broad global perspective on the influence of ESG practices and governance frameworks in shaping financial outcomes.

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Appendix A

Table A1. ESG scores.

Symbol	Panel A. Description
CS	ESG combined score
S	ESG Score
EPS	Environmental pillar score (Weight 16.8%)
RU	Resource use (Weight 4.8%)
E	Emissions (Weight 6.0%)
I	Innovation (Weight 6.0%)
SPS	Social pillar score (Weight 47.3%)
W	Workforce (Weight 9.0%)
HR	Human rights (Weight 12.0%)
Co	Community (Weight 12.0%)
PR	Product responsibility (Weight 14.4%)
GPS	Governance pillar score (Weight 35.9%)
M	Management (Weight 24.0%)
Sh	Shareholders (Weight 7.2%)
CSR_S	CSR strategy (Weight 4.8%)
CoS	Controversies
	Panel B. Numerical Values of ESG Scores
Rating	**Numerical Value**
D−	1
D	2
D+	3
C−	4
C	5
C+	6
B−	7
B	8
B+	9
A−	10
A	11
A+	12

Table A2. World governance indicator by country (2022).

		Overall		Voice and Accountability		Political Stability and Absence of Violence/Terrorism		Government Effectiveness		Regulatory Quality		Rule of Law		Control of Corruption	
	WGI	Governance Score	Percentile Rank	Governance Score	Percentile Rank	Governance Score	Percentile Rank	Governance Score	Percentile Rank	Governance Score	Percentile Rank	Governance Score	Percentile Rank	Governance Score	Percentile Rank
Brazil	Low	−0.29	40.0	0.21	55.6	−0.33	34	−0.59	30.7	−0.22	43.9	−0.26	43.4	−0.57	32.1
Canada	High	1.45	91.0	1.43	95.7	0.77	73.6	1.57	94.3	1.68	95.8	1.57	92.9	1.66	93.4
France	Low	1.04	80.2	1.11	86	0.33	56.1	1.17	83	1.19	85.4	1.18	85.4	1.26	85.4
Germany	High	1.36	88.5	1.41	94.7	0.61	67.5	1.29	88.2	1.52	92.5	1.53	92	1.82	95.8
Netherlands	High	1.52	91.8	1.54	97.6	0.72	71.2	1.58	95.3	1.71	96.7	1.66	93.4	1.92	96.7
Singapore	High	1.61	89.9	−0.05	44.4	1.46	97.2	2.14	100	2.21	100	1.78	99.1	2.09	98.6
Spain	Low	0.75	73.2	1.01	79.7	0.27	53.3	0.92	77.8	0.8	75.9	0.8	77.4	0.69	75
Sweden	High	1.57	93.2	1.52	96.6	0.9	80.2	1.57	94.8	1.68	96.2	1.69	93.9	2.06	97.6
Switzerland	High	1.70	96.7	1.62	99	1.16	92.5	2.05	99.5	1.62	94.3	1.75	97.6	2.01	97.2
United Kingdom	High	1.26	85.5	1.23	89.4	0.5	62.3	1.24	85.8	1.57	93.4	1.42	89.2	1.62	92.9
United States	Low	0.99	77.9	0.85	72.9	−0.04	45.3	1.26	86.8	1.42	91	1.37	88.7	1.1	82.5

Table A3. Data in panel and cross-sectional regressions.

			Europe							Non-Europe			
		All Countries	France	Germany	Netherlands	Spain	Sweden	Switzerland	United Kingdom	Brazil	Canada	Singapore	United States
Panel data regressions	Observations	552,750	13,750	5500	5500	16,500	2750	5500	41,250	41,250	104,500	27,500	286,000
	Number of companies	201	5	2	2	6	1	2	15	15	38	10	104
Cross-sectional regressions	Observations	2211											

Table A4. The percentage of companies that belong to either the low or high category of portfolios for each ESG score.

	Low	High
CS	4.2%	2.6%
S	3.6%	7.7%
EPS	15.9%	16.9%
RU	15.9%	32.8%
E	13.3%	29.2%
I	44.6%	7.2%
SPS	4.6%	19.0%
W	5.6%	38.5%
HR	35.4%	16.4%
Co	5.0%	47.3%
PR	13.8%	26.7%
GPS	3.1%	13.3%
M	4.6%	23.1%
Sh	9.7%	23.6%
CSR_S	17.9%	33.8%
CoS	4.0%	59.7%

Table A5 shows the core relationship between a company's overall ESG score and its stock returns. The positive numbers you see mean that companies with better ESG practices tend to have higher stock returns, especially during the COVID-19 pandemic. This suggests that having strong ESG policies might have made these companies more resilient during tough times. We also see that good governance strengthens this effect, meaning that companies in countries with better governance frameworks benefit even more from strong ESG scores. The takeaway here is clear: good ESG practices and strong governance seem to protect companies during periods of economic uncertainty, making them more attractive to investors.

In Table A6, we focus specifically on the environmental part of ESG. The results show that firms with strong environmental practices—such as reducing emissions or managing resources efficiently—enjoy better stock returns. This relationship becomes even more pronounced during the pandemic, suggesting that investors reward companies that are environmentally responsible, especially in challenging times. This is a key finding because it highlights how environmental sustainability is not just good for the planet but also good for business. For companies, this means that investing in green initiatives can pay off financially, especially when markets are unstable.

Table A7 looks at the social side of ESG, which includes how companies treat their employees, engage with communities, and ensure product responsibility. The data shows that companies scoring well in these areas tend to perform better financially. Furthermore, during the pandemic, firms with strong social practices showed even greater resilience. This makes sense—during a crisis, companies that take care of their employees and communities are likely to have a more motivated workforce and loyal customers. So, for businesses, investing in social responsibility is not just about ethics; it is a smart financial strategy, particularly in turbulent times.

Table A5. Panel data regression results for returns and overall ESG scores.

		Europe							Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
						Panel A. ESG combined score						
COVID	2.36×10^{-3} 3.53×10^{-3}	2.16×10^{-3} 7.82×10^{-3}	2.93×10^{-3} 8.55×10^{-3}	3.55×10^{-4} 8.91×10^{-3}	8.23×10^{-3} 9.49×10^{-3}	-3.58×10^{-3} 9.11×10^{-3}	-4.08×10^{-3} 6.46×10^{-3}	-2.27×10^{-3} 6.21×10^{-3}	4.53×10^{-3} 1.25×10^{-2}	8.04×10^{-3} 7.93×10^{-3}	-1.47×10^{-3} 8.39×10^{-3}	8.64×10^{-4} 5.58×10^{-3}
ESG_low	1.24×10^{-1} ** 2.81×10^{-2}	- -	- -	- -	- -	- -	- -	- -	7.52×10^{-2} 6.14×10^{-2}	3.04×10^{-2} 1.97×10^{-2}	- -	2.84×10^{-1} ** 9.21×10^{-2}
COVID*ESG_low	1.75×10^{-1} ** 8.09×10^{-2}	- -	- -	- -	- -	- -	- -	- -	1.35×10^{-1} 1.76×10^{-1}	8.41×10^{-2} 5.65×10^{-2}	- -	3.22×10^{-1} 2.64×10^{-1}
ESG_high	1.98×10^{-1} ** 4.50×10^{-2}	3.54×10^{-2} 1.28×10^{-2}	7.14×10^{-3} 5.59×10^{-3}	- -	- -	- -	7.21×10^{-3} * 4.22×10^{-3}	- -	7.52×10^{-2} 6.14×10^{-2}	- -	- -	5.68×10^{-1} ** 1.84×10^{-1}
COVID*ESG_high	2.79×10^{-1} ** 1.29×10^{-1}	4.49×10^{-2} 3.67×10^{-2}	1.23×10^{-2} 1.60×10^{-2}	- -	- -	- -	4.33×10^{-5} 1.21×10^{-2}	- -	1.35×10^{-1} 1.76×10^{-1}	- -	- -	6.44×10^{-1} 5.29×10^{-1}
Constant	4.79×10^{-3} ** 1.23×10^{-3}	6.81×10^{-3} ** 2.73×10^{-3}	3.21×10^{-3} 2.98×10^{-3}	3.99×10^{-3} 3.11×10^{-3}	4.59×10^{-3} 3.31×10^{-3}	5.82×10^{-3} * 3.18×10^{-3}	4.10×10^{-3} * 2.25×10^{-3}	4.23×10^{-3} * 2.17×10^{-3}	4.46×10^{-3} 4.37×10^{-3}	3.02×10^{-3} 2.77×10^{-3}	5.14×10^{-3} * 2.93×10^{-3}	5.52×10^{-3} ** 1.95×10^{-3}
R-squared	0.0435	0.0075	0.0115	0.0025	0.0117	0.0150	0.0388	0.0130	0.0128	0.0160	0.0300	0.0225
						Panel B. ESG score						
COVID	2.33×10^{-3} 3.53×10^{-3}	2.16×10^{-3} 7.82×10^{-3}	2.93×10^{-3} 8.55×10^{-3}	3.55×10^{-4} 8.91×10^{-3}	8.23×10^{-3} 9.49×10^{-3}	-3.58×10^{-3} 9.11×10^{-3}	-4.08×10^{-3} 6.46×10^{-3}	-2.27×10^{-3} 6.21×10^{-3}	4.53×10^{-3} 1.25×10^{-2}	8.04×10^{-3} 7.93×10^{-3}	-1.47×10^{-3} 8.39×10^{-3}	8.07×10^{-4} 5.57×10^{-3}
ESG_low	1.41×10^{-1} ** 3.21×10^{-2}	- -	- -	- -	- -	- -	- -	- -	- -	3.04×10^{-2} 1.97×10^{-2}	- -	2.83×10^{-1} ** 9.20×10^{-2}
COVID*ESG_low	1.98×10^{-1} ** 9.24×10^{-2}	- -	- -	- -	- -	- -	- -	- -	- -	8.41×10^{-2} 5.65×10^{-2}	- -	3.18×10^{-1} 2.64×10^{-1}
ESG_high	6.59×10^{-2} ** 1.50×10^{-2}	- -	3.57×10^{-3} 2.79×10^{-3}	- -	- -	5.39×10^{-3} * 2.98×10^{-3}	3.60×10^{-3} * 2.11×10^{-3}	1.84×10^{-2} * 9.48×10^{-3}	- -	- -	- -	8.08×10^{-2} ** 2.63×10^{-2}
COVID*ESG_high	9.26×10^{-2} ** 4.31×10^{-2}	- -	6.14×10^{-3} 8.01×10^{-3}	- -	- -	2.24×10^{-3} 8.54×10^{-3}	2.16×10^{-5} 6.05×10^{-3}	9.13×10^{-3} 2.72×10^{-2}	- -	- -	- -	9.10×10^{-2} 7.54×10^{-2}
Constant	4.79×10^{-3} ** 1.23×10^{-3}	6.81×10^{-3} ** 2.73×10^{-3}	3.21×10^{-3} 2.98×10^{-3}	3.99×10^{-3} 3.11×10^{-3}	4.59×10^{-3} 3.31×10^{-3}	5.82×10^{-3} * 3.18×10^{-3}	4.10×10^{-3} * 2.25×10^{-3}	4.23×10^{-3} * 2.17×10^{-3}	4.46×10^{-3} 4.37×10^{-3}	3.02×10^{-3} 2.77×10^{-3}	5.14×10^{-3} * 2.93×10^{-3}	5.50×10^{-3} ** 1.94×10^{-3}
R-squared	0.0425	0.0075	0.0115	0.0025	0.0117	0.0150	0.0388	0.0130	0.0128	0.0160	0.0300	0.0200

Notes: ** and * refer to 5% and 10% levels of statistical significance, respectively.

Table A6. Panel data regression results for returns and environmental (E) scores.

		Europe							Non Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
Panel A. Environmental pillar score												
COVID	2.36×10^{-3} 3.53×10^{-3}	2.16×10^{-3} 7.82×10^{-3}	2.93×10^{-3} 8.55×10^{-3}	3.55×10^{-4} 8.91×10^{-3}	8.23×10^{-3} 9.49×10^{-3}	-3.58×10^{-3} 9.11×10^{-3}	-4.08×10^{-3} 6.46×10^{-3}	-2.27×10^{-3} 6.21×10^{-3}	4.53×10^{-3} 1.25×10^{-2}	7.86×10^{-3} 7.63×10^{-3}	-1.47×10^{-3} 8.39×10^{-3}	8.63×10^{-4} 5.51×10^{-3}
ESG_low	3.20×10^{-2} ** 7.26×10^{-3}	- -	- -	- -	- -	- -	- -	2.77×10^{-2} * 1.42×10^{-2}	3.76×10^{-2} 3.07×10^{-2}	8.79×10^{-3} 5.41×10^{-3}	- -	6.24×10^{-2} ** 2.00×10^{-2}
COVID*ESG_low	4.50×10^{-2} ** 2.09×10^{-2}	- -	- -	- -	- -	- -	- -	1.37×10^{-2} 4.08×10^{-2}	6.74×10^{-2} 8.79×10^{-2}	2.38×10^{-2} 1.55×10^{-2}	- -	7.08×10^{-2} 5.74×10^{-2}
ESG_high	3.00×10^{-2} ** 6.82×10^{-3}	3.54×10^{-2} ** 1.28×10^{-2}	3.57×10^{-3} 2.79×10^{-3}	- -	- -	5.39×10^{-3} * 2.98×10^{-3}	3.60×10^{-3} * 2.11×10^{-3}	1.38×10^{-2} * 7.11×10^{-3}	2.51×10^{-2} 2.05×10^{-2}	5.28×10^{-2} 3.24×10^{-2}	2.48×10^{-2} * 1.37×10^{-2}	3.74×10^{-2} ** 1.20×10^{-2}
COVID*ESG_high	4.23×10^{-2} ** 1.96×10^{-2}	4.49×10^{-2} 3.67×10^{-2}	6.14×10^{-3} 8.01×10^{-3}	- -	- -	2.24×10^{-3} 8.54×10^{-3}	2.16×10^{-5} 6.05×10^{-3}	6.85×10^{-3} 2.04×10^{-2}	4.50×10^{-2} 5.86×10^{-2}	1.42×10^{-1} 9.30×10^{-2}	1.83×10^{-2} 3.94×10^{-2}	4.25×10^{-2} 3.45×10^{-2}
Constant	4.79×10^{-3} ** 1.23×10^{-3}	6.81×10^{-3} ** 2.73×10^{-3}	3.21×10^{-3} 2.98×10^{-3}	3.99×10^{-3} 3.11×10^{-3}	4.59×10^{-3} 3.31×10^{-3}	5.82×10^{-3} * 3.18×10^{-3}	4.10×10^{-3} * 2.25×10^{-3}	4.23×10^{-3} * 2.17×10^{-3}	4.46×10^{-3} 4.37×10^{-3}	3.10×10^{-3} 2.66×10^{-3}	5.14×10^{-3} * 2.93×10^{-3}	5.51×10^{-3} ** 1.92×10^{-3}
R-squared	0.0435	0.0075	0.0115	0.0025	0.0390	0.0150	0.0388	0.0130	0.0128	0.0172	0.0300	0.0250
Panel B. Resource use score												
COVID	2.36×10^{-3} 3.53×10^{-3}	2.16×10^{-3} 7.82×10^{-3}	2.93×10^{-3} 8.55×10^{-3}	3.55×10^{-4} 8.91×10^{-3}	8.23×10^{-3} 9.49×10^{-3}	-3.58×10^{-3} 9.11×10^{-3}	-4.08×10^{-3} 6.46×10^{-3}	-2.27×10^{-3} 6.21×10^{-3}	4.53×10^{-3} 1.25×10^{-2}	8.04×10^{-3} 7.93×10^{-3}	-1.47×10^{-3} 8.39×10^{-3}	8.64×10^{-4} 5.58×10^{-3}
ESG_low	3.20×10^{-2} ** 7.26×10^{-3}	- -	- -	- -	- -	- -	- -	2.77×10^{-2} * 1.42×10^{-2}	2.51×10^{-2} 2.05×10^{-2}	1.01×10^{-2} 6.57×10^{-3}	- -	5.16×10^{-2} ** 1.68×10^{-2}
COVID*ESG_low	4.50×10^{-2} ** 2.09×10^{-2}	- -	- -	- -	- -	- -	- -	1.37×10^{-2} 4.08×10^{-2}	4.50×10^{-2} 5.86×10^{-2}	2.80×10^{-2} 1.88×10^{-2}	- -	5.86×10^{-2} 4.81×10^{-2}
ESG_high	1.55×10^{-2} ** 3.52×10^{-3}	8.84×10^{-3} ** 3.19×10^{-3}	3.57×10^{-3} 2.79×10^{-3}	- -	- -	5.39×10^{-3} * 2.98×10^{-3}	3.60×10^{-3} * 2.11×10^{-3}	9.22×10^{-3} * 4.74×10^{-3}	1.07×10^{-2} 8.77×10^{-3}	5.07×10^{-2} 3.28×10^{-2}	1.65×10^{-2} * 9.15×10^{-3}	1.58×10^{-2} ** 5.12×10^{-3}
COVID*ESG_high	2.18×10^{-2} ** 1.01×10^{-2}	1.12×10^{-2} 9.17×10^{-3}	6.14×10^{-3} 8.01×10^{-3}	- -	- -	2.24×10^{-3} 8.54×10^{-3}	2.16×10^{-5} 6.05×10^{-3}	4.57×10^{-3} 1.36×10^{-2}	1.93×10^{-2} 2.51×10^{-2}	1.40×10^{-1} 9.41×10^{-2}	1.22×10^{-2} 2.62×10^{-2}	1.79×10^{-2} 1.47×10^{-2}
Constant	4.79×10^{-3} ** 1.23×10^{-3}	6.81×10^{-3} ** 2.73×10^{-3}	3.21×10^{-3} 2.98×10^{-3}	3.99×10^{-3} 3.11×10^{-3}	4.59×10^{-3} 3.31×10^{-3}	5.82×10^{-3} * 3.18×10^{-3}	4.10×10^{-3} * 2.25×10^{-3}	4.23×10^{-3} * 2.17×10^{-3}	4.46×10^{-3} 4.37×10^{-3}	3.02×10^{-3} 2.77×10^{-3}	5.14×10^{-3} * 2.93×10^{-3}	5.52×10^{-3} ** 1.95×10^{-3}
R-squared	0.0435	0.0075	0.0115	0.0025	0.0390	0.0150	0.0388	0.0130	0.0128	0.0333	0.0300	0.0225

Table A6. *Cont.*

	Europe								Non Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
Panel C. Emissions score												
COVID	2.36×10^{-3} 3.53×10^{-3}	2.16×10^{-3} 7.82×10^{-3}	2.93×10^{-3} 8.55×10^{-3}	3.55×10^{-4} 8.91×10^{-3}	8.23×10^{-3} 9.49×10^{-3}	-3.58×10^{-3} 9.11×10^{-3}	-4.08×10^{-3} 6.46×10^{-3}	-2.27×10^{-3} 6.21×10^{-3}	4.53×10^{-3} 1.25×10^{-2}	8.10×10^{-3} 7.84×10^{-3}	-1.47×10^{-3} 8.39×10^{-3}	8.42×10^{-4} 5.52×10^{-3}
ESG_low	3.81×10^{-2} ** 8.66×10^{-3}	- -	- -	- -	- -	- -	- -	- -	2.51×10^{-2} 2.05×10^{-2}	1.17×10^{-2} 7.49×10^{-3}	- -	5.68×10^{-2} ** 1.82×10^{-2}
COVID*ESG_low	5.37×10^{-2} ** 2.49×10^{-2}	- -	- -	- -	- -	- -	- -	- -	4.50×10^{-2} 5.86×10^{-2}	3.25×10^{-2} 2.15×10^{-2}	- -	6.43×10^{-2} 5.23×10^{-2}
ESG_high	5.86×10^{-3} ** 1.33×10^{-3}	7.07×10^{-3} ** 2.56×10^{-3}	3.57×10^{-3} 2.79×10^{-3}	4.03×10^{-3} 2.91×10^{-3}	5.59×10^{-3} * 3.10×10^{-3}	5.39×10^{-3} * 2.98×10^{-3}	3.60×10^{-3} * 2.11×10^{-3}	3.95×10^{-3} * 2.03×10^{-3}	6.27×10^{-3} 5.11×10^{-3}	6.07×10^{-3} 3.89×10^{-3}	4.96×10^{-3} * 2.74×10^{-3}	6.24×10^{-3} ** 2.00×10^{-3}
COVID*ESG_high	8.26×10^{-3} ** 3.83×10^{-3}	8.97×10^{-3} 7.33×10^{-3}	6.14×10^{-3} 8.01×10^{-3}	4.34×10^{-3} 8.35×10^{-3}	1.28×10^{-2} 8.89×10^{-3}	2.24×10^{-3} 8.54×10^{-3}	2.16×10^{-5} 6.05×10^{-3}	1.96×10^{-3} 5.82×10^{-3}	1.12×10^{-2} 1.47×10^{-2}	1.69×10^{-2} 1.12×10^{-2}	3.67×10^{-3} 7.87×10^{-3}	7.06×10^{-3} 5.75×10^{-3}
Constant	4.79×10^{-3} ** 1.23×10^{-3}	6.81×10^{-3} ** 2.73×10^{-3}	3.21×10^{-3} 2.98×10^{-3}	3.99×10^{-3} 3.11×10^{-3}	4.59×10^{-3} 3.31×10^{-3}	5.82×10^{-3} * 3.18×10^{-3}	4.10×10^{-3} * 2.25×10^{-3}	4.23×10^{-3} * 2.17×10^{-3}	4.46×10^{-3} 4.37×10^{-3}	3.01×10^{-3} 2.73×10^{-3}	5.14×10^{-3} * 2.93×10^{-3}	5.52×10^{-3} ** 1.93×10^{-3}
R-squared	0.0435	0.0075	0.0115	0.0025	0.0390	0.0150	0.0388	0.0130	0.0128	0.0345	0.0300	0.0225
Panel D. Innovation score												
COVID	2.36×10^{-3} 3.53×10^{-3}	2.16×10^{-3} 7.82×10^{-3}	2.93×10^{-3} 8.55×10^{-3}	3.55×10^{-4} 8.91×10^{-3}	8.23×10^{-3} 9.49×10^{-3}	-3.58×10^{-3} 9.11×10^{-3}	-4.08×10^{-3} 6.46×10^{-3}	-2.27×10^{-3} 6.21×10^{-3}	4.53×10^{-3} 1.25×10^{-2}	8.28×10^{-3} 8.04×10^{-3}	-1.47×10^{-3} 8.39×10^{-3}	8.46×10^{-4} 5.52×10^{-3}
ESG_low	1.14×10^{-2} ** 2.59×10^{-3}	3.54×10^{-2} ** 1.28×10^{-2}	- -	- -	2.79×10^{-2} * 1.55×10^{-2}	- -	7.21×10^{-3} * 4.22×10^{-3}	9.22×10^{-3} * 4.74×10^{-3}	1.25×10^{-2} 1.02×10^{-2}	5.07×10^{-3} 3.35×10^{-3}	1.65×10^{-2} * 9.15×10^{-3}	1.43×10^{-2} ** 4.60×10^{-3}
COVID*ESG_low	1.61×10^{-2} ** 7.44×10^{-3}	4.49×10^{-2} 3.67×10^{-2}	- -	- -	6.41×10^{-2} 4.45×10^{-2}	- -	4.33×10^{-5} 1.21×10^{-2}	4.57×10^{-3} 1.36×10^{-2}	2.25×10^{-2} 2.93×10^{-2}	1.44×10^{-2} 9.61×10^{-3}	1.22×10^{-2} 2.62×10^{-2}	1.62×10^{-2} 1.32×10^{-2}
ESG_high	7.08×10^{-2} ** 1.61×10^{-2}	- -	- -	- -	- -	- -	- -	5.53×10^{-2} * 2.84×10^{-2}	2.51×10^{-2} 2.05×10^{-2}	7.35×10^{-2} 4.86×10^{-2}	- -	7.16×10^{-2} ** 2.30×10^{-2}
COVID*ESG_high	9.97×10^{-2} ** 4.62×10^{-2}	- -	- -	- -	- -	- -	- -	2.74×10^{-2} 8.15×10^{-2}	4.50×10^{-2} 5.86×10^{-2}	2.08×10^{-1} 1.39×10^{-1}	- -	8.11×10^{-2} 6.61×10^{-2}
Constant	4.79×10^{-3} ** 1.23×10^{-3}	6.81×10^{-3} ** 2.73×10^{-3}	3.21×10^{-3} 2.98×10^{-3}	3.99×10^{-3} 3.11×10^{-3}	4.59×10^{-3} 3.31×10^{-3}	5.82×10^{-3} * 3.18×10^{-3}	4.10×10^{-3} * 2.25×10^{-3}	4.23×10^{-3} * 2.17×10^{-3}	4.46×10^{-3} 4.37×10^{-3}	2.96×10^{-3} 2.80×10^{-3}	5.14×10^{-3} * 2.93×10^{-3}	5.51×10^{-3} ** 1.93×10^{-3}
R-squared	0.0435	0.0075	0.0115	0.0025	0.0390	0.0150	0.0388	0.0130	0.0128	0.0343	0.0300	0.0225

Notes: ** and * refer to 5% and 10% levels of statistical significance, respectively.

Table A7. Panel data regression results for returns and social pillar (S) scores.

		Europe							Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
Panel A. Social pillar score												
COVID	2.20×10^{-3} 3.48×10^{-3}	2.16×10^{-3} 7.82×10^{-3}	2.93×10^{-3} 8.55×10^{-3}	-3.54×10^{-3} 5.43×10^{-3}	9.21×10^{-3} 8.43×10^{-3}	-3.58×10^{-3} 9.11×10^{-3}	-4.08×10^{-3} 6.46×10^{-3}	-2.23×10^{-3} 5.95×10^{-3}	4.47×10^{-3} 1.24×10^{-2}	7.77×10^{-3} 7.31×10^{-3}	-1.47×10^{-3} 8.39×10^{-3}	7.55×10^{-4} 5.14×10^{-3}
ESG_low	1.13×10^{-1} ** 2.53×10^{-2}	- -	- -	- -	- -	- -	- -	5.42×10^{-2} ** 2.73×10^{-2}	7.17×10^{-2} 6.06×10^{-2}	3.27×10^{-2} * 1.82×10^{-2}	- -	2.91×10^{-1} ** 8.90×10^{-2}
COVID*ESG_low	1.56×10^{-1} ** 7.26×10^{-2}	- -	- -	- -	- -	- -	- -	2.68×10^{-2} 7.82×10^{-2}	1.31×10^{-1} 1.74×10^{-1}	8.45×10^{-2} 5.21×10^{-2}	- -	3.26×10^{-1} 2.56×10^{-1}
ESG_high	2.74×10^{-2} ** 6.14×10^{-3}	1.18×10^{-2} ** 4.26×10^{-3}	3.57×10^{-3} 2.79×10^{-3}	- -	2.91×10^{-2} ** 1.38×10^{-2}	5.39×10^{-3} * 2.98×10^{-3}	3.60×10^{-3} * 2.11×10^{-3}	1.81×10^{-2} ** 9.08×10^{-3}	2.39×10^{-2} 2.02×10^{-2}	8.17×10^{-2} * 4.54×10^{-2}	- -	2.91×10^{-2} ** 8.90×10^{-3}
COVID*ESG_high	3.78×10^{-2} ** 1.77×10^{-2}	1.50×10^{-2} 1.22×10^{-2}	6.14×10^{-3} 8.01×10^{-3}	- -	6.95×10^{-2} * 3.95×10^{-2}	2.24×10^{-3} 8.54×10^{-3}	2.16×10^{-5} 6.05×10^{-3}	8.93×10^{-3} 2.61×10^{-2}	4.35×10^{-2} 5.79×10^{-2}	2.11×10^{-1} 1.30×10^{-1}	- -	3.26×10^{-2} 2.56×10^{-2}
Constant	4.80×10^{-3} ** 1.21×10^{-3}	6.81×10^{-3} ** 2.73×10^{-3}	3.21×10^{-3} 2.98×10^{-3}	4.66×10^{-3} ** 1.89×10^{-3}	4.69×10^{-3} 2.94×10^{-3}	5.82×10^{-3} * 3.18×10^{-3}	4.10×10^{-3} * 2.25×10^{-3}	4.15×10^{-3} ** 2.08×10^{-3}	4.24×10^{-3} 4.31×10^{-3}	3.35×10^{-3} 2.55×10^{-3}	5.14×10^{-3} * 2.93×10^{-3}	5.40×10^{-3} ** 1.79×10^{-3}
R-squared	0.0390	0.0075	0.0115	0.0413	0.0387	0.0150	0.0388	0.0135	0.0128	0.0366	0.0300	0.0200
Panel B. Workforce score												
COVID	2.19×10^{-3} 3.53×10^{-3}	2.16×10^{-3} 7.82×10^{-3}	2.93×10^{-3} 8.55×10^{-3}	7.34×10^{-3} 9.09×10^{-3}	8.23×10^{-3} 9.49×10^{-3}	-3.58×10^{-3} 9.11×10^{-3}	-4.08×10^{-3} 6.46×10^{-3}	-2.54×10^{-3} 6.07×10^{-3}	4.53×10^{-3} 1.25×10^{-2}	7.23×10^{-3} 7.41×10^{-3}	-1.47×10^{-3} 8.39×10^{-3}	7.37×10^{-4} 5.46×10^{-3}
ESG_low	9.39×10^{-2} ** 2.10×10^{-2}	- -	- -	- -	- -	- -	- -	- -	7.52×10^{-2} 6.14×10^{-2}	3.20×10^{-2} * 1.84×10^{-2}	- -	1.20×10^{-1} ** 3.75×10^{-2}
COVID*ESG_low	1.29×10^{-1} ** 6.04×10^{-2}	- -	- -	- -	- -	- -	- -	- -	1.35×10^{-1} 1.76×10^{-1}	8.03×10^{-2} 5.28×10^{-2}	- -	1.34×10^{-1} 1.08×10^{-1}
ESG_high	1.38×10^{-2} ** 3.08×10^{-3}	7.07×10^{-3} ** 2.56×10^{-3}	3.57×10^{-3} 2.79×10^{-3}	1.11×10^{-2} 8.92×10^{-3}	6.99×10^{-3} * 3.88×10^{-3}	5.39×10^{-3} * 2.98×10^{-3}	3.60×10^{-3} * 2.11×10^{-3}	5.98×10^{-3} * 3.09×10^{-3}	1.07×10^{-2} 8.77×10^{-3}	3.20×10^{-2} * 1.84×10^{-2}	1.24×10^{-2} * 6.86×10^{-3}	1.71×10^{-2} ** 5.35×10^{-3}
COVID*ESG_high	1.89×10^{-2} ** 8.86×10^{-3}	8.97×10^{-3} 7.33×10^{-3}	6.14×10^{-3} 8.01×10^{-3}	3.04×10^{-2} 2.56×10^{-2}	1.60×10^{-2} 1.11×10^{-2}	2.24×10^{-3} 8.54×10^{-3}	2.16×10^{-5} 6.05×10^{-3}	2.50×10^{-3} 8.86×10^{-3}	1.93×10^{-2} 2.51×10^{-2}	8.03×10^{-2} 5.28×10^{-2}	9.17×10^{-3} 1.97×10^{-2}	1.91×10^{-2} 1.54×10^{-2}
Constant	4.90×10^{-3} ** 1.23×10^{-3}	6.81×10^{-3} ** 2.73×10^{-3}	3.21×10^{-3} 2.98×10^{-3}	2.80×10^{-3} 3.17×10^{-3}	4.59×10^{-3} 3.31×10^{-3}	5.82×10^{-3} * 3.18×10^{-3}	4.10×10^{-3} * 2.25×10^{-3}	4.15×10^{-3} * 2.12×10^{-3}	4.46×10^{-3} 4.37×10^{-3}	3.33×10^{-3} 2.59×10^{-3}	5.14×10^{-3} * 2.93×10^{-3}	5.62×10^{-3} ** 1.90×10^{-3}
R-squared	0.0373	0.0075	0.0115	0.0316	0.0365	0.0150	0.0388	0.0170	0.0128	0.0308	0.0300	0.0175

Table A7. *Cont.*

	Europe								Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
Panel C. Human rights score												
COVID	2.25×10^{-3} 3.55×10^{-3}	2.16×10^{-3} 7.82×10^{-3}	2.93×10^{-3} 8.55×10^{-3}	3.55×10^{-4} 8.91×10^{-3}	8.23×10^{-3} 9.49×10^{-3}	-3.58×10^{-3} 9.11×10^{-3}	-4.08×10^{-3} 6.46×10^{-3}	-2.27×10^{-3} 6.21×10^{-3}	4.53×10^{-3} 1.25×10^{-2}	7.91×10^{-3} 7.82×10^{-3}	-1.47×10^{-3} 8.39×10^{-3}	7.62×10^{-4} 5.52×10^{-3}
ESG_low	1.48×10^{-2} ** 3.37×10^{-3}	- -	- -	- -	- -	- -	- -	1.11×10^{-2} * 5.69×10^{-3}	3.76×10^{-2} 3.07×10^{-2}	6.30×10^{-3} 4.05×10^{-3}	1.24×10^{-2} * 6.86×10^{-3}	1.76×10^{-2} ** 5.63×10^{-3}
COVID*ESG_low	2.05×10^{-2} ** 9.68×10^{-3}	- -	- -	- -	- -	- -	- -	5.48×10^{-3} 1.63×10^{-2}	6.74×10^{-2} 8.79×10^{-2}	1.73×10^{-2} 1.16×10^{-2}	9.17×10^{-3} 1.97×10^{-2}	1.97×10^{-2} 1.62×10^{-2}
ESG_high	3.20×10^{-2} ** 7.26×10^{-3}	8.84×10^{-3} ** 3.19×10^{-3}	3.57×10^{-3} 2.79×10^{-3}	8.06×10^{-3} 5.83×10^{-3}	1.40×10^{-2} * 7.76×10^{-3}	5.39×10^{-3} * 2.98×10^{-3}	3.60×10^{-3} * 2.11×10^{-3}	1.84×10^{-2} * 9.48×10^{-3}	2.51×10^{-2} 2.05×10^{-2}	7.56×10^{-2} 4.86×10^{-2}	- -	5.00×10^{-2} ** 1.60×10^{-2}
COVID*ESG_high	4.43×10^{-2} ** 2.09×10^{-2}	1.12×10^{-2} 9.17×10^{-3}	6.14×10^{-3} 8.01×10^{-3}	8.69×10^{-3} 1.67×10^{-2}	3.20×10^{-2} 2.22×10^{-2}	2.24×10^{-3} 8.54×10^{-3}	2.16×10^{-5} 6.05×10^{-3}	9.13×10^{-3} 2.72×10^{-2}	4.50×10^{-2} 5.86×10^{-2}	2.08×10^{-1} 1.39×10^{-1}	- -	5.59×10^{-2} 4.58×10^{-2}
Constant	4.84×10^{-3} ** 1.24×10^{-3}	6.81×10^{-3} ** 2.73×10^{-3}	3.21×10^{-3} 2.98×10^{-3}	3.99×10^{-3} 3.11×10^{-3}	4.59×10^{-3} 3.31×10^{-3}	5.82×10^{-3} * 3.18×10^{-3}	4.10×10^{-3} * 2.25×10^{-3}	4.23×10^{-3} * 2.17×10^{-3}	4.46×10^{-3} 4.37×10^{-3}	3.01×10^{-3} 2.73×10^{-3}	5.14×10^{-3} * 2.93×10^{-3}	5.57×10^{-3} ** 1.93×10^{-3}
R-squared	0.0388	0.0075	0.0115	0.0025	0.0365	0.0150	0.0388	0.0130	0.0128	0.0331	0.0300	0.0175
Panel D. Community score												
COVID	2.25×10^{-3} 3.51×10^{-3}	2.16×10^{-3} 7.82×10^{-3}	2.93×10^{-3} 8.55×10^{-3}	3.55×10^{-4} 8.91×10^{-3}	5.55×10^{-3} 9.18×10^{-3}	-3.58×10^{-3} 9.11×10^{-3}	-4.08×10^{-3} 6.46×10^{-3}	-2.40×10^{-3} 6.12×10^{-3}	4.53×10^{-3} 1.25×10^{-2}	8.04×10^{-3} 7.93×10^{-3}	-1.47×10^{-3} 8.39×10^{-3}	8.44×10^{-4} 5.52×10^{-3}
ESG_low	1.13×10^{-1} ** 2.55×10^{-2}	- -	- -	- -	3.53×10^{-2} * 1.80×10^{-2}	- -	0.00×10^{0} 0.00×10^{0}	2.06×10^{-2} ** 1.00×10^{-2}	7.52×10^{-2} 6.14×10^{-2}	7.61×10^{-2} 4.92×10^{-2}	2.48×10^{-2} * 1.37×10^{-2}	- -
COVID*ESG_low	1.57×10^{-1} ** 7.33×10^{-2}	- -	- -	- -	6.46×10^{-2} 5.17×10^{-2}	- -	0.00×10^{0} 0.00×10^{0}	1.01×10^{-2} 2.87×10^{-2}	1.35×10^{-1} 1.76×10^{-1}	2.10×10^{-1} 1.41×10^{-1}	1.83×10^{-2} 3.94×10^{-2}	- -
ESG_high	1.07×10^{-2} ** 2.41×10^{-3}	3.54×10^{-2} 1.28×10^{-2}	3.57×10^{-3} 2.79×10^{-3}	4.03×10^{-3} 2.91×10^{-3}	1.76×10^{-2} * 9.01×10^{-3}	5.39×10^{-3} * 2.98×10^{-3}	3.60×10^{-3} * 2.11×10^{-3}	1.24×10^{-2} ** 6.01×10^{-3}	1.25×10^{-2} 1.02×10^{-2}	1.52×10^{-2} 9.85×10^{-3}	4.96×10^{-2} * 2.74×10^{-2}	9.20×10^{-3} ** 2.98×10^{-3}
COVID*ESG_high	1.49×10^{-2} ** 6.94×10^{-3}	4.49×10^{-2} 3.67×10^{-2}	6.14×10^{-3} 8.01×10^{-3}	4.34×10^{-3} 8.35×10^{-3}	3.23×10^{-2} 2.58×10^{-2}	2.24×10^{-3} 8.54×10^{-3}	2.16×10^{-5} 6.05×10^{-3}	6.05×10^{-3} 1.72×10^{-2}	2.25×10^{-2} 2.93×10^{-2}	4.21×10^{-2} 2.82×10^{-2}	3.67×10^{-2} 7.87×10^{-2}	1.04×10^{-2} 8.56×10^{-3}
Constant	4.81×10^{-3} ** 1.22×10^{-3}	6.81×10^{-3} ** 2.73×10^{-3}	3.21×10^{-3} 2.98×10^{-3}	3.99×10^{-3} 3.11×10^{-3}	5.20×10^{-3} 3.20×10^{-3}	5.82×10^{-3} * 3.18×10^{-3}	4.10×10^{-3} * 2.25×10^{-3}	4.42×10^{-3} * 2.14×10^{-3}	4.46×10^{-3} 4.37×10^{-3}	3.02×10^{-3} 2.77×10^{-3}	5.14×10^{-3} * 2.93×10^{-3}	5.47×10^{-3} * 1.93×10^{-3}
R-squared	0.0398	0.0075	0.0115	0.0250	0.0355	0.0150	0.0388	0.0150	0.0128	0.0100	0.0300	0.0475

Table A7. *Cont.*

	Europe								Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
	Panel E. Product responsibility score											
COVID	2.40×10^{-3}	2.16×10^{-3}	2.93×10^{-3}	3.55×10^{-4}	8.23×10^{-3}	-3.58×10^{-3}	-4.08×10^{-3}	-2.40×10^{-3}	4.53×10^{-3}	7.84×10^{-3}	-1.47×10^{-3}	1.05×10^{-3}
	3.54×10^{-3}	7.82×10^{-3}	8.55×10^{-3}	8.91×10^{-3}	9.49×10^{-3}	9.11×10^{-3}	6.46×10^{-3}	6.12×10^{-3}	1.25×10^{-2}	7.96×10^{-3}	8.39×10^{-3}	5.59×10^{-3}
ESG_low	3.79×10^{-2} **	-	-	-	2.79×10^{-2} *	-	-	3.09×10^{-2} **	7.52×10^{-2}	1.05×10^{-2}	-	7.35×10^{-2} **
	8.58×10^{-3}	-	-	-	1.55×10^{-2}	-	-	1.50×10^{-2}	6.14×10^{-2}	6.77×10^{-3}	-	2.38×10^{-2}
COVID*ESG_low	5.35×10^{-2} **	-	-	-	6.41×10^{-2}	-	-	1.51×10^{-2}	1.35×10^{-1}	2.84×10^{-2}	-	8.54×10^{-2}
	2.47×10^{-2}	-	-	-	4.45×10^{-2}	-	-	4.31×10^{-2}	1.76×10^{-1}	1.94×10^{-2}	-	6.83×10^{-2}
ESG_high	1.97×10^{-2} **	1.18×10^{-2} **	7.14×10^{-3}	-	1.40×10^{-2} *	5.39×10^{-3} *	3.60×10^{-3} *	1.03×10^{-2} **	1.50×10^{-2}	5.26×10^{-2}	4.96×10^{-2} **	2.10×10^{-2} **
	4.45×10^{-3}	4.26×10^{-3}	5.59×10^{-3}	-	7.76×10^{-3}	2.98×10^{-3}	2.11×10^{-3}	5.00×10^{-3}	1.23×10^{-2}	3.38×10^{-2}	2.74×10^{-2}	6.79×10^{-3}
Covid*ESG_high	2.78×10^{-2} **	1.50×10^{-2}	1.23×10^{-2}	-	3.20×10^{-2}	2.24×10^{-3}	2.16×10^{-5}	5.04×10^{-3}	2.70×10^{-2}	1.42×10^{-1}	3.67×10^{-2}	2.44×10^{-2}
	1.28×10^{-2}	1.22×10^{-2}	1.60×10^{-2}	-	2.22×10^{-2}	8.54×10^{-3}	6.05×10^{-3}	1.44×10^{-2}	3.52×10^{-2}	9.70×10^{-2}	7.87×10^{-2}	1.95×10^{-2}
Constant	4.82×10^{-3} **	6.81×10^{-3} **	3.21×10^{-3}	3.99×10^{-3}	4.59×10^{-3}	5.82×10^{-3} *	4.10×10^{-3} *	4.42×10^{-3} **	4.46×10^{-3}	3.09×10^{-3}	5.14×10^{-3} *	5.52×10^{-3} **
	1.24×10^{-3}	2.73×10^{-3}	2.98×10^{-3}	3.11×10^{-3}	3.31×10^{-3}	3.18×10^{-3}	2.25×10^{-3}	2.14×10^{-3}	4.37×10^{-3}	2.78×10^{-3}	2.93×10^{-3}	1.95×10^{-3}
R-squared	0.0443	0.0075	0.0115	0.0025	0.0365	0.0150	0.0388	0.0150	0.0128	0.0314	0.0300	0.0350

Notes: ** and * refer to 5% and 10% levels of statistical significance, respectively.

Table A8. Panel data regression results for returns and governance pillar (G) scores.

		Europe							Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
Panel A. Governance pillar score												
COVID	2.20×10^{-3} 3.51×10^{-3}	2.16×10^{-3} 7.82×10^{-3}	2.93×10^{-3} 8.55×10^{-3}	3.55×10^{-4} 8.91×10^{-3}	8.23×10^{-3} 9.49×10^{-3}	-3.58×10^{-3} 9.11×10^{-3}	-4.08×10^{-3} 6.46×10^{-3}	-2.27×10^{-3} 6.21×10^{-3}	4.53×10^{-3} 1.25×10^{-2}	7.22×10^{-3} 7.71×10^{-3}	-1.47×10^{-3} 8.39×10^{-3}	8.64×10^{-4} 5.58×10^{-3}
ESG_low	1.65×10^{-1} ** 3.73×10^{-2}	- -	- -	- -	- -	- -	- -	- -	- -	4.94×10^{-2} 3.19×10^{-2}	4.96×10^{-2} * 2.74×10^{-2}	2.84×10^{-1} ** 9.21×10^{-2}
COVID*ESG_low	2.27×10^{-1} ** 1.07×10^{-1}	- -	- -	- -	- -	- -	- -	- -	- -	1.30×10^{-1} 9.15×10^{-2}	3.67×10^{-2} 7.87×10^{-2}	3.22×10^{-1} 2.64×10^{-1}
ESG_high	3.80×10^{-2} ** 8.61×10^{-3}	3.54×10^{-2} ** 1.28×10^{-2}	3.57×10^{-3} 2.79×10^{-3}	- -	- -	5.39×10^{-3} * 2.98×10^{-3}	7.21×10^{-3} * 4.22×10^{-3}	1.84×10^{-2} * 9.48×10^{-3}	3.76×10^{-2} 3.07×10^{-2}	4.94×10^{-2} 3.19×10^{-2}	4.96×10^{-2} * 2.74×10^{-2}	4.73×10^{-2} ** 1.54×10^{-2}
COVID*ESG_high	5.25×10^{-2} ** 2.47×10^{-2}	4.49×10^{-2} 3.67×10^{-2}	6.14×10^{-3} 8.01×10^{-3}	- -	- -	2.24×10^{-3} 8.54×10^{-3}	4.33×10^{-5} 1.21×10^{-2}	9.13×10^{-3} 2.72×10^{-2}	6.74×10^{-2} 8.79×10^{-2}	1.30×10^{-1} 9.15×10^{-2}	3.67×10^{-2} 7.87×10^{-2}	5.37×10^{-2} 4.41×10^{-2}
Constant	4.79×10^{-3} ** 1.22×10^{-3}	6.81×10^{-3} ** 2.73×10^{-3}	3.21×10^{-3} 2.98×10^{-3}	3.99×10^{-3} 3.11×10^{-3}	4.59×10^{-3} 3.31×10^{-3}	5.82×10^{-3} * 3.18×10^{-3}	4.10×10^{-3} * 2.25×10^{-3}	4.23×10^{-3} * 2.17×10^{-3}	4.46×10^{-3} 4.37×10^{-3}	3.02×10^{-3} 2.69×10^{-3}	5.14×10^{-3} * 2.93×10^{-3}	5.52×10^{-3} ** 1.95×10^{-3}
R-squared	0.0383	0.0075	0.0115	0.0025	0.0365	0.0150	0.0388	0.0130	0.0128	0.0283	0.0300	0.0225
Panel B. Management score												
COVID	2.36×10^{-3} 3.53×10^{-3}	2.16×10^{-3} 7.82×10^{-3}	2.93×10^{-3} 8.55×10^{-3}	3.55×10^{-4} 8.91×10^{-3}	8.23×10^{-3} 9.49×10^{-3}	-3.58×10^{-3} 9.11×10^{-3}	-4.08×10^{-3} 6.46×10^{-3}	-2.27×10^{-3} 6.21×10^{-3}	4.53×10^{-3} 1.25×10^{-2}	8.04×10^{-3} 7.93×10^{-3}	-1.47×10^{-3} 8.39×10^{-3}	8.64×10^{-4} 5.58×10^{-3}
ESG_low	1.10×10^{-1} ** 2.50×10^{-2}	- -	- -	- -	- -	- -	- -	- -	7.52×10^{-2} 6.14×10^{-2}	3.04×10^{-2} 1.97×10^{-2}	4.96×10^{-2} * 2.74×10^{-2}	2.84×10^{-1} ** 9.21×10^{-2}
COVID*ESG_low	1.55×10^{-1} ** 7.19×10^{-2}	- -	- -	- -	- -	- -	- -	- -	1.35×10^{-1} 1.76×10^{-1}	8.41×10^{-2} 5.65×10^{-2}	3.67×10^{-2} 7.87×10^{-2}	3.22×10^{-1} 2.64×10^{-1}
ESG_high	2.20×10^{-2} ** 5.00×10^{-3}	3.54×10^{-2} ** 1.28×10^{-2}	3.57×10^{-3} 2.79×10^{-3}	8.06×10^{-3} 5.83×10^{-3}	- -	5.39×10^{-3} * 2.98×10^{-3}	3.60×10^{-3} * 2.11×10^{-3}	1.38×10^{-2} * 7.11×10^{-3}	2.51×10^{-2} 2.05×10^{-2}	1.90×10^{-2} 1.23×10^{-2}	4.96×10^{-2} * 2.74×10^{-2}	2.58×10^{-2} ** 8.37×10^{-3}
COVID*ESG_high	3.10×10^{-2} ** 1.44×10^{-2}	4.49×10^{-2} 3.67×10^{-2}	6.14×10^{-3} 8.01×10^{-3}	8.69×10^{-3} 1.67×10^{-2}	- -	2.24×10^{-3} 8.54×10^{-3}	2.16×10^{-5} 6.05×10^{-3}	6.85×10^{-3} 2.04×10^{-2}	4.50×10^{-2} 5.86×10^{-2}	5.26×10^{-2} 3.53×10^{-2}	3.67×10^{-2} 7.87×10^{-2}	2.93×10^{-2} 2.40×10^{-2}
Constant	4.79×10^{-3} ** 1.23×10^{-3}	6.81×10^{-3} ** 2.73×10^{-3}	3.21×10^{-3} 2.98×10^{-3}	3.99×10^{-3} 3.11×10^{-3}	4.59×10^{-3} 3.31×10^{-3}	5.82×10^{-3} * 3.18×10^{-3}	4.10×10^{-3} * 2.25×10^{-3}	4.23×10^{-3} * 2.17×10^{-3}	4.46×10^{-3} 4.37×10^{-3}	3.02×10^{-3} 2.77×10^{-3}	5.14×10^{-3} * 2.93×10^{-3}	5.52×10^{-3} ** 1.95×10^{-3}
R-squared	0.0435	0.0075	0.0115	0.0025	0.0365	0.0150	0.0388	0.0130	0.0128	0.0333	0.0300	0.0225

Table A8. *Cont.*

	Europe								Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
Panel C. Shareholders score												
COVID	2.36×10^{-3} 3.53×10^{-3}	2.16×10^{-3} 7.82×10^{-3}	2.93×10^{-3} 8.55×10^{-3}	3.55×10^{-4} 8.91×10^{-3}	8.23×10^{-3} 9.49×10^{-3}	-3.58×10^{-3} 9.11×10^{-3}	-4.08×10^{-3} 6.46×10^{-3}	-2.27×10^{-3} 6.21×10^{-3}	4.53×10^{-3} 1.25×10^{-2}	8.34×10^{-3} 8.00×10^{-3}	-1.47×10^{-3} 8.39×10^{-3}	9.70×10^{-4} 5.44×10^{-3}
ESG_low	5.22×10^{-2} ** 1.19×10^{-2}	3.54×10^{-2} ** 1.28×10^{-2}	- -	8.06×10^{-3} 5.83×10^{-3}	- -	- -	7.21×10^{-3} * 4.22×10^{-3}	- -	3.76×10^{-2} 3.07×10^{-2}	3.41×10^{-2} 2.29×10^{-2}	4.96×10^{-2} * 2.74×10^{-2}	6.48×10^{-2} ** 2.05×10^{-2}
COVID*ESG_low	7.35×10^{-2} ** 3.41×10^{-2}	4.49×10^{-2} 3.67×10^{-2}	- -	8.69×10^{-3} 1.67×10^{-2}	- -	- -	4.33×10^{-5} 1.21×10^{-2}	- -	6.74×10^{-2} 8.79×10^{-2}	9.82×10^{-2} 6.56×10^{-2}	3.67×10^{-2} 7.87×10^{-2}	7.47×10^{-2} 5.90×10^{-2}
ESG_high	2.16×10^{-2} ** 4.89×10^{-3}	3.54×10^{-2} ** 1.28×10^{-2}	3.57×10^{-3} 2.79×10^{-3}	- -	1.40×10^{-2} * 7.76×10^{-3}	5.39×10^{-3} ** 2.98×10^{-3}	- -	1.84×10^{-2} * 9.48×10^{-3}	1.25×10^{-2} 1.02×10^{-2}	3.41×10^{-2} 2.29×10^{-2}	4.96×10^{-2} * 2.74×10^{-2}	2.24×10^{-2} ** 7.11×10^{-3}
COVID*ESG_high	3.04×10^{-2} ** 1.41×10^{-2}	4.49×10^{-2} 3.67×10^{-2}	6.14×10^{-3} 8.01×10^{-3}	- -	3.20×10^{-2} 2.22×10^{-2}	2.24×10^{-3} 8.54×10^{-3}	- -	9.13×10^{-3} 2.72×10^{-2}	2.25×10^{-2} 2.93×10^{-2}	9.82×10^{-2} 6.56×10^{-2}	3.67×10^{-2} 7.87×10^{-2}	2.59×10^{-2} 2.04×10^{-2}
Constant	4.79×10^{-3} ** 1.23×10^{-3}	6.81×10^{-3} ** 2.73×10^{-3}	3.21×10^{-3} 2.98×10^{-3}	3.99×10^{-3} 3.11×10^{-3}	4.59×10^{-3} 3.31×10^{-3}	5.82×10^{-3} * 3.18×10^{-3}	4.10×10^{-3} * 2.25×10^{-3}	4.23×10^{-3} * 2.17×10^{-3}	4.46×10^{-3} 4.37×10^{-3}	2.88×10^{-3} 2.79×10^{-3}	5.14×10^{-3} * 2.93×10^{-3}	5.49×10^{-3} ** 1.90×10^{-3}
R-squared	0.0435	0.0075	0.0115	0.0025	0.0365	0.0150	0.0388	0.0130	0.0128	0.0351	0.0300	0.0300
Panel D. CSR strategy score												
COVID	2.38×10^{-3} 3.53×10^{-3}	2.16×10^{-3} 7.82×10^{-3}	2.93×10^{-3} 8.55×10^{-3}	3.55×10^{-4} 8.91×10^{-3}	8.23×10^{-3} 9.49×10^{-3}	-3.58×10^{-3} 9.11×10^{-3}	-4.08×10^{-3} 6.46×10^{-3}	-2.27×10^{-3} 6.21×10^{-3}	4.53×10^{-3} 1.25×10^{-2}	8.28×10^{-3} 8.04×10^{-3}	-1.47×10^{-3} 8.39×10^{-3}	8.78×10^{-4} 5.52×10^{-3}
ESG_low	2.86×10^{-2} ** 6.43×10^{-3}	- -	- -	- -	2.79×10^{-2} * 1.55×10^{-2}	- -	- -	2.77×10^{-2} * 1.42×10^{-2}	1.88×10^{-2} 1.53×10^{-2}	1.13×10^{-2} 7.48×10^{-3}	- -	3.88×10^{-2} ** 1.23×10^{-2}
COVID*ESG_low	4.02×10^{-2} ** 1.85×10^{-2}	- -	- -	- -	6.41×10^{-2} 4.45×10^{-2}	- -	- -	1.37×10^{-2} 4.08×10^{-2}	3.37×10^{-2} 4.40×10^{-2}	3.20×10^{-2} 2.14×10^{-2}	- -	4.40×10^{-2} 3.52×10^{-2}
ESG_high	1.51×10^{-2} ** 3.41×10^{-3}	3.54×10^{-2} ** 1.28×10^{-2}	3.57×10^{-3} 2.79×10^{-3}	- -	- -	5.39×10^{-3} ** 2.98×10^{-3}	7.21×10^{-3} * 4.22×10^{-3}	1.11×10^{-2} * 5.69×10^{-3}	1.50×10^{-2} 1.23×10^{-2}	2.10×10^{-2} 1.39×10^{-2}	1.24×10^{-2} * 6.86×10^{-3}	1.45×10^{-2} ** 4.60×10^{-3}
COVID*ESG_high	2.13×10^{-2} ** 9.80×10^{-3}	4.49×10^{-2} 3.67×10^{-2}	6.14×10^{-3} 8.01×10^{-3}	- -	- -	2.24×10^{-3} 8.54×10^{-3}	4.33×10^{-5} 1.21×10^{-2}	5.48×10^{-3} 1.63×10^{-2}	2.70×10^{-2} 3.52×10^{-2}	5.95×10^{-2} 3.98×10^{-2}	9.17×10^{-3} 1.97×10^{-2}	1.65×10^{-2} 1.32×10^{-2}
Constant	4.84×10^{-3} ** 1.23×10^{-3}	6.81×10^{-3} ** 2.73×10^{-3}	3.21×10^{-3} 2.98×10^{-3}	3.99×10^{-3} 3.11×10^{-3}	4.59×10^{-3} 3.31×10^{-3}	5.82×10^{-3} * 3.18×10^{-3}	4.10×10^{-3} * 2.25×10^{-3}	4.23×10^{-3} * 2.17×10^{-3}	4.46×10^{-3} 4.37×10^{-3}	2.96×10^{-3} 2.80×10^{-3}	5.14×10^{-3} * 2.93×10^{-3}	5.59×10^{-3} ** 1.93×10^{-3}
R-squared	0.0443	0.0075	0.0115	0.0025	0.0365	0.0150	0.0388	0.0130	0.0128	0.0343	0.0300	0.0250

Notes: ** and * refer to 5% and 10% levels of statistical significance, respectively.

Table A8 highlights the importance of governance—things such as ethical management, transparency, and board independence. The results show that firms with stronger governance practices tend to have higher stock returns. Interestingly, while governance continues to be important during the pandemic, its effect is not as dramatically boosted as with environmental or social scores. This suggests that strong governance is a steady factor in a company's success, whether times are good or bad. It underscores the idea that having solid governance structures in place can help companies manage risks and maintain stability, which is always valuable to investors.

Table A9 shows what happens when things go wrong. Firms that score higher in controversies—whether it is environmental scandals, labor violations, or governance failures—suffer in terms of stock returns. And this impact is even more severe during the pandemic, when negative news can hit companies even harder. These findings are a reminder that bad behavior has real financial consequences. For companies, it is crucial to avoid actions that could damage their reputation, especially in a crisis. For investors, this table reinforces the importance of keeping an eye on a company's controversies, as these can signal significant financial risk.

Table A9. Panel data regression results for returns and controversies score.

		Europe							Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
COVID	2.52×10^{-3}	2.16×10^{-3}	2.93×10^{-3}	3.55×10^{-4}	8.23×10^{-3}	-3.58×10^{-3}	-4.08×10^{-3}	-2.11×10^{-3}	4.53×10^{-3}	7.80×10^{-3}	-1.47×10^{-3}	1.13×10^{-3}
	3.57×10^{-3}	7.82×10^{-3}	8.55×10^{-3}	8.91×10^{-3}	9.49×10^{-3}	9.11×10^{-3}	6.46×10^{-3}	6.07×10^{-3}	1.25×10^{-2}	7.63×10^{-3}	8.39×10^{-3}	5.55×10^{-3}
ESG_low	1.24×10^{-1} **	-	-	-	-	-	7.21×10^{-3} *	-	7.52×10^{-2}	-	-	9.46×10^{-2} **
	2.84×10^{-2}	-	-	-	-	-	4.22×10^{-3}	-	6.14×10^{-2}	-	-	3.05×10^{-2}
COVID*ESG_low	1.78×10^{-1} **	-	-	-	-	-	4.33×10^{-5}	-	1.35×10^{-1}	-	-	1.11×10^{-1}
	8.17×10^{-2}	-	-	-	-	-	1.21×10^{-2}	-	1.76×10^{-1}	-	-	8.77×10^{-2}
ESG_high	8.24×10^{-3} **	1.18×10^{-2} **	-	4.03×10^{-3}	5.59×10^{-3} *	-	-	9.50×10^{-3}	5.78×10^{-3}	4.37×10^{-3}	6.20×10^{-3} *	1.16×10^{-2} **
	1.90×10^{-3}	4.26×10^{-3}	-	2.91×10^{-3}	3.10×10^{-3}	-	-	4.30×10^{-3}	4.72×10^{-3}	2.86×10^{-3}	3.43×10^{-3}	3.74×10^{-3}
COVID*ESG_high	1.18×10^{-2} **	1.50×10^{-2}	-	4.34×10^{-3}	1.28×10^{-2}	-	-	5.49×10^{-3}	1.04×10^{-2}	1.22×10^{-2}	4.59×10^{-3}	1.36×10^{-2}
	5.45×10^{-3}	1.22×10^{-2}	-	8.35×10^{-3}	8.89×10^{-3}	-	-	1.23×10^{-2}	1.35×10^{-2}	8.21×10^{-3}	9.84×10^{-3}	1.07×10^{-2}
Constant	4.77×10^{-3} **	6.81×10^{-3} **	3.21×10^{-3}	3.99×10^{-3}	4.59×10^{-3}	5.82×10^{-3} *	4.10×10^{-3} *	4.64×10^{-3} **	4.46×10^{-3}	2.86×10^{-3}	5.14×10^{-3} *	5.48×10^{-3} **
	1.24×10^{-3}	2.73×10^{-3}	2.98×10^{-3}	3.11×10^{-3}	3.31×10^{-3}	3.18×10^{-3}	2.25×10^{-3}	2.12×10^{-3}	4.37×10^{-3}	2.66×10^{-3}	2.93×10^{-3}	1.94×10^{-3}
R-squared	0.0241	0.0038	0.0058	0.0013	0.0183	0.0075	0.0194	0.0059	0.0064	0.0168	0.0150	0.0200

Notes: ** and * refer to 5% and 10% levels of statistical significance, respectively.

Table A10. Panel data regression results for absolute returns and overall ESG scores.

		Europe							Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
Panel A. ESG combined score												
COVID	7.61×10^{-3} **	4.55×10^{-3} **	5.87×10^{-3} **	5.87×10^{-3} **	7.23×10^{-3} **	5.20×10^{-3} **	3.15×10^{-3} **	7.36×10^{-3} **	8.12×10^{-3} **	8.28×10^{-3} **	1.18×10^{-3} **	8.30×10^{-3} **
	2.79×10^{-4}	5.19×10^{-4}	5.75×10^{-4}	6.11×10^{-4}	6.42×10^{-4}	6.44×10^{-4}	4.22×10^{-4}	4.05×10^{-4}	7.35×10^{-4}	5.19×10^{-4}	4.88×10^{-4}	3.71×10^{-4}
ESG_low	3.15×10^{-1} **	-	-	-	-	-	-	-	3.24×10^{-1} **	1.21×10^{-1} **	-	5.28×10^{-1} **
	2.52×10^{-3}	-	-	-	-	-	-	-	3.69×10^{-3}	1.35×10^{-3}	-	6.69×10^{-3}
COVID*ESG_low	4.78×10^{-1} **	-	-	-	-	-	-	-	4.31×10^{-1} **	1.76×10^{-1} **	-	8.96×10^{-1} **
	1.67×10^{-2}	-	-	-	-	-	-	-	1.93×10^{-2}	7.05×10^{-3}	-	3.07×10^{-2}
ESG_high	5.04×10^{-1} **	6.08×10^{-2} **	2.20×10^{-2} **	-	-	-	1.70×10^{-2} **	-	3.24×10^{-1} **	-	-	1.06×10^{0} **
	4.03×10^{-3}	8.60×10^{-4}	3.83×10^{-4}	-	-	-	2.79×10^{-4}	-	3.69×10^{-3}	-	-	1.34×10^{-2}
COVID*ESG_high	7.65×10^{-1} **	8.08×10^{-2} **	3.23×10^{-2} **	-	-	-	2.26×10^{-2} **	-	4.31×10^{-1} **	-	-	1.79×10^{0} **
	2.68×10^{-2}	3.92×10^{-3}	1.53×10^{-3}	-	-	-	1.17×10^{-3}	-	1.93×10^{-2}	-	-	6.15×10^{-2}
Constant	1.20×10^{-2} **	1.16×10^{-2} **	1.03×10^{-2} **	1.17×10^{-2} **	1.53×10^{-2} **	9.95×10^{-3} **	8.14×10^{-3} **	1.17×10^{-2} **	2.06×10^{-2} **	1.49×10^{-2} **	1.40×10^{-2} **	9.45×10^{-3} **
	9.72×10^{-5}	1.81×10^{-4}	2.01×10^{-4}	2.13×10^{-4}	2.24×10^{-4}	2.25×10^{-4}	1.47×10^{-4}	1.41×10^{-4}	2.56×10^{-4}	1.81×10^{-4}	1.70×10^{-4}	1.29×10^{-4}
R-squared	0.0561	0.0290	0.0389	0.0346	0.0234	0.0247	0.0212	0.0285	0.0113	0.0225	0.0113	0.0271
Panel B. ESG score												
COVID	7.60×10^{-3} **	4.55×10^{-3} **	5.87×10^{-3} **	5.87×10^{-3} **	7.23×10^{-3} **	5.20×10^{-3} **	3.15×10^{-3} **	7.36×10^{-3} **	8.12×10^{-3} **	8.28×10^{-3} **	1.18×10^{-3} **	8.30×10^{-3} **
	2.78×10^{-4}	5.19×10^{-4}	5.75×10^{-4}	6.11×10^{-4}	6.42×10^{-4}	6.44×10^{-4}	4.22×10^{-4}	4.05×10^{-4}	7.35×10^{-4}	5.19×10^{-4}	4.88×10^{-4}	3.70×10^{-4}
ESG_low	3.60×10^{-1} **	-	-	-	-	-	-	-	-	1.21×10^{-1} **	-	5.27×10^{-1} **
	2.88×10^{-3}	-	-	-	-	-	-	-	-	1.35×10^{-3}	-	6.68×10^{-3}
COVID*ESG_low	5.46×10^{-1} **	-	-	-	-	-	-	-	-	1.76×10^{-1} **	-	8.95×10^{-1} **
	1.91×10^{-2}	-	-	-	-	-	-	-	-	7.05×10^{-3}	-	3.07×10^{-2}
ESG_high	1.68×10^{-1} **	-	1.10×10^{-2} **	-	-	1.06×10^{-2} **	8.52×10^{-3} **	5.88×10^{-2} **	-	-	-	1.51×10^{-1} **
	1.34×10^{-3}	-	1.92×10^{-4}	-	-	2.13×10^{-4}	1.40×10^{-4}	6.56×10^{-4}	-	-	-	1.91×10^{-3}
COVID*ESG_high	2.55×10^{-1} **	-	1.62×10^{-2} **	-	-	1.52×10^{-2} **	1.13×10^{-2} **	8.89×10^{-2} **	-	-	-	2.56×10^{-1} **
	8.91×10^{-3}	-	7.66×10^{-4}	-	-	8.01×10^{-4}	5.85×10^{-4}	3.39×10^{-3}	-	-	-	8.77×10^{-3}
Constant	1.20×10^{-2} **	1.16×10^{-2} **	1.03×10^{-2} **	1.17×10^{-2} **	1.53×10^{-2} **	9.95×10^{-3} **	8.14×10^{-3} **	1.17×10^{-2} **	2.06×10^{-2} **	1.49×10^{-2} **	1.40×10^{-2} **	9.43×10^{-3} **
	9.71×10^{-5}	1.81×10^{-4}	2.01×10^{-4}	2.13×10^{-4}	2.24×10^{-4}	2.25×10^{-4}	1.47×10^{-4}	1.41×10^{-4}	2.56×10^{-4}	1.81×10^{-4}	1.70×10^{-4}	1.29×10^{-4}
R-squared	0.0562	0.0290	0.0389	0.0346	0.0234	0.0247	0.0212	0.0285	0.0113	0.0225	0.0113	0.0272

Notes: ** refer to 5% of statistical significance.

Table A11. Panel data regression results for absolute returns and environmental (E) scores.

		Europe							Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
Panel A. Environmental pillar score												
COVID	7.61×10^{-3} **	4.55×10^{-3} **	5.87×10^{-3} **	5.87×10^{-3} **	7.23×10^{-3} **	5.20×10^{-3} **	3.15×10^{-3} **	7.36×10^{-3} **	8.12×10^{-3} **	8.49×10^{-3} **	1.18×10^{-3} **	8.22×10^{-3} **
	2.79×10^{-4}	5.19×10^{-4}	5.75×10^{-4}	6.11×10^{-4}	6.42×10^{-4}	6.44×10^{-4}	4.22×10^{-4}	4.05×10^{-4}	7.35×10^{-4}	5.10×10^{-4}	4.88×10^{-4}	3.68×10^{-4}
ESG_low	8.13×10^{-2} **	-	-	-	-	-	-	8.81×10^{-2} **	1.62×10^{-1} **	3.43×10^{-2} **	-	1.16×10^{-1} **
	6.50×10^{-4}	-	-	-	-	-	-	9.84×10^{-4}	1.84×10^{-3}	3.80×10^{-4}	-	1.46×10^{-3}
COVID*ESG_low	1.23×10^{-1} **	-	-	-	-	-	-	1.33×10^{-1} **	2.15×10^{-1} **	5.05×10^{-2} **	-	1.96×10^{-1} **
	4.32×10^{-3}	-	-	-	-	-	-	5.08×10^{-3}	9.67×10^{-3}	1.99×10^{-3}	-	6.74×10^{-3}
ESG_high	7.64×10^{-2} **	6.08×10^{-2} **	1.10×10^{-2} **	-	-	1.06×10^{-2} **	8.52×10^{-3} **	4.41×10^{-2} **	1.08×10^{-1} **	2.06×10^{-1} **	7.06×10^{-2} **	6.96×10^{-2} **
	6.11×10^{-4}	8.60×10^{-4}	1.92×10^{-4}	-	-	2.13×10^{-4}	1.40×10^{-4}	4.92×10^{-4}	1.23×10^{-3}	2.28×10^{-3}	7.98×10^{-4}	8.76×10^{-4}
COVID*ESG_high	1.16×10^{-1} **	8.08×10^{-2} **	1.62×10^{-2} **	-	-	1.52×10^{-2} **	1.13×10^{-2} **	6.67×10^{-2} **	1.44×10^{-1} **	3.03×10^{-1} **	7.58×10^{-2} **	1.18×10^{-1} **
	4.05×10^{-3}	3.92×10^{-3}	7.66×10^{-4}	-	-	8.01×10^{-4}	5.85×10^{-4}	2.54×10^{-3}	6.44×10^{-3}	1.19×10^{-2}	4.35×10^{-3}	4.05×10^{-3}
Constant	1.20×10^{-2} **	1.16×10^{-2} **	1.03×10^{-2} **	1.17×10^{-2} **	1.53×10^{-2} **	9.95×10^{-3} **	8.14×10^{-3} **	1.17×10^{-2} **	2.06×10^{-2} **	1.48×10^{-2} **	1.40×10^{-2} **	9.44×10^{-3} **
	9.72×10^{-5}	1.81×10^{-4}	2.01×10^{-4}	2.13×10^{-4}	2.24×10^{-4}	2.25×10^{-4}	1.47×10^{-4}	1.41×10^{-4}	2.56×10^{-4}	1.78×10^{-4}	1.70×10^{-4}	1.28×10^{-4}
R-squared	0.0561	0.0290	0.0389	0.0346	0.0234	0.0247	0.0212	0.0285	0.0113	0.0243	0.0113	0.0270
Panel B. Resource use score												
COVID	7.61×10^{-3} **	4.55×10^{-3} **	5.87×10^{-3} **	5.87×10^{-3} **	7.23×10^{-3} **	5.20×10^{-3} **	3.15×10^{-3} **	7.36×10^{-3} **	8.12×10^{-3} **	8.28×10^{-3} **	1.18×10^{-3} **	8.30×10^{-3} **
	2.79×10^{-4}	5.19×10^{-4}	5.75×10^{-4}	6.11×10^{-4}	6.42×10^{-4}	6.44×10^{-4}	4.22×10^{-4}	4.05×10^{-4}	7.35×10^{-4}	5.19×10^{-4}	4.88×10^{-4}	3.71×10^{-4}
ESG_low	8.13×10^{-2} **	-	-	-	-	-	-	8.81×10^{-2} **	1.08×10^{-1} **	4.04×10^{-2} **	-	9.60×10^{-2} **
	6.51×10^{-4}	-	-	-	-	-	-	9.84×10^{-4}	1.23×10^{-3}	4.50×10^{-4}	-	1.22×10^{-3}
COVID*ESG_low	1.23×10^{-1} **	-	-	-	-	-	-	1.33×10^{-1} **	1.44×10^{-1} **	5.88×10^{-2} **	-	1.63×10^{-1} **
	4.32×10^{-3}	-	-	-	-	-	-	5.08×10^{-3}	6.44×10^{-3}	2.35×10^{-3}	-	5.59×10^{-3}
ESG_high	3.94×10^{-2} **	1.52×10^{-2} **	1.10×10^{-2} **	-	-	1.06×10^{-2} **	8.52×10^{-3} **	2.94×10^{-2} **	4.63×10^{-2} **	2.02×10^{-1} **	4.71×10^{-2} **	2.93×10^{-2} **
	3.15×10^{-4}	2.15×10^{-4}	1.92×10^{-4}	-	-	2.13×10^{-4}	1.40×10^{-4}	3.28×10^{-4}	5.27×10^{-4}	2.25×10^{-3}	5.32×10^{-4}	3.72×10^{-4}
COVID*ESG_high	5.97×10^{-2} **	2.02×10^{-2} **	1.62×10^{-2} **	-	-	1.52×10^{-2} **	1.13×10^{-2} **	4.45×10^{-2} **	6.15×10^{-2} **	2.94×10^{-1} **	5.05×10^{-2} **	4.98×10^{-2} **
	2.09×10^{-3}	9.79×10^{-4}	7.66×10^{-4}	-	-	8.01×10^{-4}	5.85×10^{-4}	1.69×10^{-3}	2.76×10^{-3}	1.18×10^{-2}	2.90×10^{-3}	1.71×10^{-3}
Constant	1.20×10^{-2} **	1.16×10^{-2} **	1.03×10^{-2} **	1.17×10^{-2} **	1.53×10^{-2} **	9.95×10^{-3} **	8.14×10^{-3} **	1.17×10^{-2} **	2.06×10^{-2} **	1.49×10^{-2} **	1.40×10^{-2} **	9.45×10^{-3} **
	9.72×10^{-5}	1.81×10^{-4}	2.01×10^{-4}	2.13×10^{-4}	2.24×10^{-4}	2.25×10^{-4}	1.47×10^{-4}	1.41×10^{-4}	2.56×10^{-4}	1.81×10^{-4}	1.70×10^{-4}	1.29×10^{-4}
R-squared	0.0561	0.0290	0.0389	0.0346	0.0234	0.0247	0.0212	0.0285	0.0113	0.0225	0.0113	0.0271

Table A11. *Cont.*

	Europe								Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
						Panel C. Emissions score						
COVID	7.61×10^{-3} **	4.55×10^{-3} **	5.87×10^{-3} **	5.87×10^{-3} **	7.23×10^{-3} **	5.20×10^{-3} **	3.15×10^{-3} **	7.36×10^{-3} **	8.12×10^{-3} **	8.42×10^{-3} **	1.18×10^{-3} **	8.24×10^{-3} **
	2.79×10^{-4}	5.19×10^{-4}	5.75×10^{-4}	6.11×10^{-4}	6.42×10^{-4}	6.44×10^{-4}	4.22×10^{-4}	4.05×10^{-4}	7.35×10^{-4}	5.16×10^{-4}	4.88×10^{-4}	3.69×10^{-4}
ESG_low	9.69×10^{-2} **	-	-	-	-	-	-	-	1.08×10^{-1} **	4.67×10^{-2} **	-	1.05×10^{-1} **
	7.76×10^{-4}	-	-	-	-	-	-	-	1.23×10^{-3}	5.18×10^{-4}	-	1.33×10^{-3}
COVID*ESG_low	1.47×10^{-1} **	-	-	-	-	-	-	-	1.44×10^{-1} **	6.84×10^{-2} **	-	1.79×10^{-1} **
	5.15×10^{-3}	-	-	-	-	-	-	-	6.44×10^{-3}	2.71×10^{-3}	-	6.13×10^{-3}
ESG_high	1.49×10^{-2} **	1.22×10^{-2} **	1.10×10^{-2} **	1.24×10^{-2} **	1.61×10^{-2} **	1.06×10^{-2} **	8.52×10^{-3} **	1.26×10^{-2} **	2.70×10^{-2} **	2.43×10^{-2} **	1.41×10^{-2} **	1.16×10^{-2} **
	1.19×10^{-4}	1.72×10^{-4}	1.92×10^{-4}	2.03×10^{-4}	2.15×10^{-4}	2.13×10^{-4}	1.40×10^{-4}	1.41×10^{-4}	3.07×10^{-4}	2.69×10^{-4}	1.60×10^{-4}	1.46×10^{-4}
COVID*ESG_high	2.26×10^{-2} **	1.62×10^{-2} **	1.62×10^{-2} **	1.76×10^{-2} **	2.25×10^{-2} **	1.52×10^{-2} **	1.13×10^{-2} **	1.91×10^{-2} **	3.59×10^{-2} **	3.55×10^{-2} **	1.52×10^{-2} **	1.96×10^{-2} **
	7.92×10^{-4}	7.83×10^{-4}	7.66×10^{-4}	8.44×10^{-4}	1.01×10^{-3}	8.01×10^{-4}	5.85×10^{-4}	7.26×10^{-4}	1.61×10^{-3}	1.41×10^{-3}	8.69×10^{-4}	6.74×10^{-4}
Constant	1.20×10^{-2} **	1.16×10^{-2} **	1.03×10^{-2} **	1.17×10^{-2} **	1.53×10^{-2} **	9.95×10^{-3} **	8.14×10^{-3} **	1.17×10^{-2} **	2.06×10^{-2} **	1.50×10^{-2} **	1.40×10^{-2} **	9.44×10^{-3} **
	9.72×10^{-5}	1.81×10^{-4}	2.01×10^{-4}	2.13×10^{-4}	2.24×10^{-4}	2.25×10^{-4}	1.47×10^{-4}	1.41×10^{-4}	2.56×10^{-4}	1.80×10^{-4}	1.70×10^{-4}	1.29×10^{-4}
R-squared	0.0561	0.0290	0.0389	0.0346	0.0234	0.0247	0.0212	0.0285	0.0113	0.0235	0.0113	0.0271
						Panel D. Innovation score						
COVID	7.61×10^{-3} **	4.55×10^{-3} **	5.87×10^{-3} **	5.87×10^{-3} **	7.23×10^{-3} **	5.20×10^{-3} **	3.15×10^{-3} **	7.36×10^{-3} **	8.12×10^{-3} **	8.41×10^{-3} **	1.18×10^{-3} **	8.25×10^{-3} **
	2.79×10^{-4}	5.19×10^{-4}	5.75×10^{-4}	6.11×10^{-4}	6.42×10^{-4}	6.44×10^{-4}	4.22×10^{-4}	4.05×10^{-4}	7.35×10^{-4}	5.25×10^{-4}	4.88×10^{-4}	3.69×10^{-4}
ESG_low	2.90×10^{-2} **	6.08×10^{-2} **	-	-	8.07×10^{-2} **	-	1.70×10^{-2} **	2.94×10^{-2} **	5.40×10^{-2} **	2.06×10^{-2} **	4.71×10^{-2} **	2.66×10^{-2} **
	2.32×10^{-4}	8.60×10^{-4}	-	-	1.08×10^{-3}	-	2.79×10^{-4}	3.28×10^{-4}	6.15×10^{-4}	2.30×10^{-4}	5.32×10^{-4}	3.36×10^{-4}
Covid*ESG_low	4.39×10^{-2} **	8.08×10^{-2} **	-	-	1.12×10^{-1} **	-	2.26×10^{-2} **	4.45×10^{-2} **	7.18×10^{-2} **	3.00×10^{-2} **	5.05×10^{-2} **	4.51×10^{-2} **
	1.54×10^{-3}	3.92×10^{-3}	-	-	5.03×10^{-3}	-	1.17×10^{-3}	1.69×10^{-3}	3.22×10^{-3}	1.20×10^{-3}	2.90×10^{-3}	1.55×10^{-3}
ESG_high	1.80×10^{-1} **	-	-	-	-	-	-	1.76×10^{-1} **	1.08×10^{-1} **	2.99×10^{-1} **	-	1.33×10^{-1} **
	1.44×10^{-3}	-	-	-	-	-	-	1.97×10^{-3}	1.23×10^{-3}	3.33×10^{-3}	-	1.68×10^{-3}
COVID*ESG_high	2.73×10^{-1} **	-	-	-	-	-	-	2.67×10^{-1} **	1.44×10^{-1} **	4.35×10^{-1} **	-	2.26×10^{-1} **
	9.56×10^{-3}	-	-	-	-	-	-	1.02×10^{-2}	6.44×10^{-3}	1.74×10^{-2}	-	7.74×10^{-3}
Constant	1.20×10^{-2} **	1.16×10^{-2} **	1.03×10^{-2} **	1.17×10^{-2} **	1.53×10^{-2} **	9.95×10^{-3} **	8.14×10^{-3} **	1.17×10^{-2} **	2.06×10^{-2} **	1.51×10^{-2} **	1.40×10^{-2} **	9.44×10^{-3} **
	9.72×10^{-5}	1.81×10^{-4}	2.01×10^{-4}	2.13×10^{-4}	2.24×10^{-4}	2.25×10^{-4}	1.47×10^{-4}	1.41×10^{-4}	2.56×10^{-4}	1.83×10^{-4}	1.70×10^{-4}	1.29×10^{-4}
R-squared	0.0561	0.0290	0.0389	0.0346	0.0234	0.0247	0.0212	0.0285	0.0113	0.0226	0.0113	0.0271

Notes: ** refer to 5% of statistical significance.

Table A12. Panel data regression results for absolute returns and social pillar (S) scores.

		Europe							Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
Panel A. Social pillar score												
COVID	7.59×10^{-3} **	4.55×10^{-3} **	5.87×10^{-3} **	4.18×10^{-3} **	6.23×10^{-3} **	5.20×10^{-3} **	3.15×10^{-3} **	8.20×10^{-3} **	8.29×10^{-3} **	8.03×10^{-3} **	1.18×10^{-3} **	8.27×10^{-3} **
	2.75×10^{-4}	5.19×10^{-4}	5.75×10^{-4}	3.81×10^{-4}	5.84×10^{-4}	6.44×10^{-4}	4.22×10^{-4}	4.05×10^{-4}	7.28×10^{-4}	4.89×10^{-4}	4.88×10^{-4}	3.48×10^{-4}
ESG_low	2.87×10^{-1} **	-	-	-	-	-	-	1.90×10^{-1} **	3.20×10^{-1} **	1.18×10^{-1} **	-	5.67×10^{-1} **
	2.28×10^{-3}	-	-	-	-	-	-	2.00×10^{-3}	3.66×10^{-3}	1.28×10^{-3}	-	6.66×10^{-3}
COVID*ESG_low	4.35×10^{-1} **	-	-	-	-	-	-	2.91×10^{-1} **	4.29×10^{-1} **	1.72×10^{-1} **	-	9.52×10^{-1} **
	1.52×10^{-2}	-	-	-	-	-	-	1.07×10^{-2}	1.91×10^{-2}	6.82×10^{-3}	-	3.22×10^{-2}
ESG_high	6.98×10^{-2} **	2.03×10^{-2} **	1.10×10^{-2} **	-	7.72×10^{-2} **	1.06×10^{-2} **	8.52×10^{-3} **	6.32×10^{-2} **	1.07×10^{-1} **	2.96×10^{-1} **	-	5.67×10^{-2} **
	5.53×10^{-4}	2.87×10^{-4}	1.92×10^{-4}	-	9.76×10^{-4}	2.13×10^{-4}	1.40×10^{-4}	6.65×10^{-4}	1.22×10^{-3}	3.19×10^{-3}	-	6.66×10^{-4}
COVID*ESG_high	1.06×10^{-1} **	2.69×10^{-2} **	1.62×10^{-2} **	-	1.05×10^{-1} **	1.52×10^{-2} **	1.13×10^{-2} **	9.68×10^{-2} **	1.43×10^{-1} **	4.30×10^{-1} **	-	9.52×10^{-2} **
	3.70×10^{-3}	1.31×10^{-3}	7.66×10^{-4}	-	4.75×10^{-3}	8.01×10^{-4}	5.85×10^{-4}	3.57×10^{-3}	6.36×10^{-3}	1.71×10^{-2}	-	3.22×10^{-3}
Constant	1.20×10^{-2} **	1.16×10^{-2} **	1.03×10^{-2} **	8.54×10^{-3} **	1.47×10^{-2} **	9.95×10^{-3} **	8.14×10^{-3} **	1.26×10^{-2} **	2.03×10^{-2} **	1.46×10^{-2} **	1.40×10^{-2} **	9.70×10^{-3} **
	9.60×10^{-5}	1.81×10^{-4}	2.01×10^{-4}	1.33×10^{-4}	2.04×10^{-4}	2.25×10^{-4}	1.47×10^{-4}	1.41×10^{-4}	2.54×10^{-4}	1.71×10^{-4}	1.70×10^{-4}	1.21×10^{-4}
R-squared	0.0570	0.0290	0.0389	0.0446	0.0211	0.0247	0.0212	0.0343	0.0120	0.0237	0.0113	0.0300
Panel B. Workforce score												
COVID	7.55×10^{-3} **	4.55×10^{-3} **	5.87×10^{-3} **	5.87×10^{-3} **	7.23×10^{-3} **	5.20×10^{-3} **	3.15×10^{-3} **	7.18×10^{-3} **	8.12×10^{-3} **	8.39×10^{-3} **	1.18×10^{-3} **	8.16×10^{-3} **
	2.77×10^{-4}	5.19×10^{-4}	5.75×10^{-4}	6.29×10^{-4}	6.42×10^{-4}	6.44×10^{-4}	4.22×10^{-4}	3.97×10^{-4}	7.35×10^{-4}	4.91×10^{-4}	4.88×10^{-4}	3.65×10^{-4}
ESG_low	2.34×10^{-1} **	-	-	-	-	-	-	-	3.24×10^{-1} **	1.18×10^{-1} **	-	2.20×10^{-1} **
	1.87×10^{-3}	-	-	-	-	-	-	-	3.69×10^{-3}	1.29×10^{-3}	-	2.74×10^{-3}
COVID*ESG_low	3.54×10^{-1} **	-	-	-	-	-	-	-	4.31×10^{-1} **	1.74×10^{-1} **	-	3.70×10^{-1} **
	1.24×10^{-2}	-	-	-	-	-	-	-	1.93×10^{-2}	6.81×10^{-3}	-	1.27×10^{-2}
ESG_high	3.43×10^{-2} **	1.22×10^{-2} **	1.10×10^{-2} **	4.96×10^{-2} **	2.02×10^{-2} **	1.06×10^{-2} **	8.52×10^{-3} **	1.94×10^{-2} **	4.63×10^{-2} **	1.18×10^{-1} **	3.53×10^{-2} **	3.14×10^{-2} **
	2.74×10^{-4}	1.72×10^{-4}	1.92×10^{-4}	6.27×10^{-4}	2.69×10^{-4}	2.13×10^{-4}	1.40×10^{-4}	2.15×10^{-4}	5.27×10^{-4}	1.29×10^{-3}	3.99×10^{-4}	3.92×10^{-4}
COVID*ESG_high	5.20×10^{-2} **	1.62×10^{-2} **	1.62×10^{-2} **	6.50×10^{-2} **	2.81×10^{-2} **	1.52×10^{-2} **	1.13×10^{-2} **	2.92×10^{-2} **	6.15×10^{-2} **	1.74×10^{-1} **	3.79×10^{-2} **	5.29×10^{-2} **
	1.82×10^{-3}	7.83×10^{-4}	7.66×10^{-4}	3.07×10^{-3}	1.26×10^{-3}	8.01×10^{-4}	5.85×10^{-4}	1.12×10^{-3}	2.76×10^{-3}	6.81×10^{-3}	2.17×10^{-3}	1.82×10^{-3}
Constant	1.19×10^{-2} **	1.16×10^{-2} **	1.03×10^{-2} **	1.58×10^{-2} **	1.53×10^{-2} **	9.95×10^{-3} **	8.14×10^{-3} **	1.16×10^{-2} **	2.06×10^{-2} **	1.45×10^{-2} **	1.40×10^{-2} **	9.48×10^{-3} **
	9.67×10^{-5}	1.81×10^{-4}	2.01×10^{-4}	2.19×10^{-4}	2.24×10^{-4}	2.25×10^{-4}	1.47×10^{-4}	1.39×10^{-4}	2.56×10^{-4}	1.71×10^{-4}	1.70×10^{-4}	1.28×10^{-4}
R-squared	0.0559	0.0290	0.0389	0.0327	0.0234	0.0247	0.0212	0.0281	0.0113	0.0254	0.0113	0.0270

Table A12. *Cont.*

		Europe							Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
						Panel C. Human rights score						
COVID	7.61×10^{-3} **	4.55×10^{-3} **	5.87×10^{-3} **	5.87×10^{-3} **	7.23×10^{-3} **	5.20×10^{-3} **	3.15×10^{-3} **	7.36×10^{-3} **	8.12×10^{-3} **	8.38×10^{-3} **	1.18×10^{-3} **	8.23×10^{-3} **
	2.80×10^{-4}	5.19×10^{-4}	5.75×10^{-4}	6.11×10^{-4}	6.42×10^{-4}	6.44×10^{-4}	4.22×10^{-4}	4.05×10^{-4}	7.35×10^{-4}	5.15×10^{-4}	4.88×10^{-4}	3.69×10^{-4}
ESG_low	3.72×10^{-2} **	-	-	-	-	-	-	3.53×10^{-2} **	1.62×10^{-1} **	2.52×10^{-2} **	3.53×10^{-2} **	3.24×10^{-2} **
	3.01×10^{-4}	-	-	-	-	-	-	3.94×10^{-4}	1.84×10^{-3}	2.80×10^{-4}	3.99×10^{-4}	4.11×10^{-4}
COVID*ESG_low	5.65×10^{-2} **	-	-	-	-	-	-	5.34×10^{-2} **	2.15×10^{-1} **	3.69×10^{-2} **	3.79×10^{-2} **	5.49×10^{-2} **
	1.98×10^{-3}	-	-	-	-	-	-	2.03×10^{-3}	9.67×10^{-3}	1.47×10^{-3}	2.17×10^{-3}	1.89×10^{-3}
ESG_high	8.02×10^{-2} **	1.52×10^{-2} **	1.10×10^{-2} **	2.49×10^{-2} **	4.04×10^{-2} **	1.06×10^{-2} **	8.52×10^{-3} **	5.88×10^{-2} **	1.08×10^{-1} **	3.03×10^{-1} **	-	9.18×10^{-2} **
	6.48×10^{-4}	2.15×10^{-4}	1.92×10^{-4}	4.06×10^{-4}	5.38×10^{-4}	2.13×10^{-4}	1.40×10^{-4}	6.56×10^{-4}	1.23×10^{-3}	3.36×10^{-3}	-	1.16×10^{-3}
COVID*ESG_high	1.22×10^{-1} **	2.02×10^{-2} **	1.62×10^{-2} **	3.52×10^{-2} **	5.62×10^{-2} **	1.52×10^{-2} **	1.13×10^{-2} **	8.89×10^{-2} **	1.44×10^{-1} **	4.43×10^{-1} **	-	1.56×10^{-1} **
	4.26×10^{-3}	9.79×10^{-4}	7.66×10^{-4}	1.69×10^{-3}	2.52×10^{-3}	8.01×10^{-4}	5.85×10^{-4}	3.39×10^{-3}	6.44×10^{-3}	1.76×10^{-2}	-	5.35×10^{-3}
Constant	1.19×10^{-2} **	1.16×10^{-2} **	1.03×10^{-2} **	1.17×10^{-2} **	1.53×10^{-2} **	9.95×10^{-3} **	8.14×10^{-3} **	1.17×10^{-2} **	2.06×10^{-2} **	1.49×10^{-2} **	1.40×10^{-2} **	9.39×10^{-3} **
	9.76×10^{-5}	1.81×10^{-4}	2.01×10^{-4}	2.13×10^{-4}	2.24×10^{-4}	2.25×10^{-4}	1.47×10^{-4}	1.41×10^{-4}	2.56×10^{-4}	1.80×10^{-4}	1.70×10^{-4}	1.29×10^{-4}
R-squared	0.0557	0.0290	0.0389	0.0346	0.0234	0.0247	0.0212	0.0285	0.0113	0.0232	0.0113	0.0270
						Panel D. Community score						
COVID	7.65×10^{-3} **	4.55×10^{-3} **	5.87×10^{-3} **	5.87×10^{-3} **	7.97×10^{-3} **	5.20×10^{-3} **	3.15×10^{-3} **	7.34×10^{-3} **	8.12×10^{-3} **	8.28×10^{-3} **	1.18×10^{-3} **	8.33×10^{-3} **
	2.78×10^{-4}	5.19×10^{-4}	5.75×10^{-4}	6.11×10^{-4}	6.17×10^{-4}	6.44×10^{-4}	4.22×10^{-4}	4.06×10^{-4}	7.35×10^{-4}	5.19×10^{-4}	4.88×10^{-4}	3.70×10^{-4}
ESG_low	2.86×10^{-1} **	-	-	-	9.31×10^{-2} **	-	-	6.33×10^{-2} **	3.24×10^{-1} **	3.03×10^{-1} **	7.06×10^{-2} **	-
	2.30×10^{-3}	-	-	-	1.25×10^{-3}	-	-	7.05×10^{-4}	3.69×10^{-3}	3.38×10^{-3}	7.98×10^{-4}	-
COVID*ESG_low	4.35×10^{-1} **	-	-	-	1.35×10^{-1} **	-	-	9.56×10^{-2} **	4.31×10^{-1} **	4.41×10^{-1} **	7.58×10^{-2} **	-
	1.52×10^{-2}	-	-	-	5.77×10^{-3}	-	-	3.65×10^{-3}	1.93×10^{-2}	1.76×10^{-2}	4.35×10^{-3}	-
ESG_high	2.71×10^{-2} **	6.08×10^{-2} **	1.10×10^{-2} **	1.24×10^{-2} **	4.66×10^{-2} **	1.06×10^{-2} **	8.52×10^{-3} **	3.80×10^{-2} **	5.40×10^{-2} **	6.06×10^{-2} **	1.41×10^{-1} **	1.72×10^{-2} **
	2.18×10^{-4}	8.60×10^{-4}	1.92×10^{-4}	2.03×10^{-4}	6.24×10^{-4}	2.13×10^{-4}	1.40×10^{-4}	4.23×10^{-4}	6.15×10^{-4}	6.76×10^{-4}	1.60×10^{-3}	2.18×10^{-4}
COVID*ESG_high	4.12×10^{-2} **	8.08×10^{-2} **	1.62×10^{-2} **	1.76×10^{-2} **	6.76×10^{-2} **	1.52×10^{-2} **	1.13×10^{-2} **	5.73×10^{-2} **	7.18×10^{-2} **	8.82×10^{-2} **	1.52×10^{-1} **	2.93×10^{-2} **
	1.44×10^{-3}	3.92×10^{-3}	7.66×10^{-4}	8.44×10^{-4}	2.89×10^{-3}	8.01×10^{-4}	5.85×10^{-4}	2.19×10^{-3}	3.22×10^{-3}	3.53×10^{-3}	8.69×10^{-3}	1.00×10^{-3}
Constant	1.19×10^{-2} **	1.16×10^{-2} **	1.03×10^{-2} **	1.17×10^{-2} **	1.46×10^{-2} **	9.95×10^{-3} **	8.14×10^{-3} **	1.18×10^{-2} **	2.06×10^{-2} **	1.49×10^{-2} **	1.40×10^{-2} **	9.41×10^{-3} **
	9.69×10^{-5}	1.81×10^{-4}	2.01×10^{-4}	2.13×10^{-4}	2.15×10^{-4}	2.25×10^{-4}	1.47×10^{-4}	1.42×10^{-4}	2.56×10^{-4}	1.81×10^{-4}	1.70×10^{-4}	1.29×10^{-4}
R-squared	0.0568	0.0225	0.0373	0.0206	0.0261	0.0218	0.0329	0.0383	0.0283	0.0362	0.0369	0.0277

Table A12. *Cont.*

	Europe								Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
	Panel E. Product responsibility score											
COVID	5.35×10^{-3} **	4.55×10^{-3} **	5.87×10^{-3} **	5.87×10^{-3} **	6.14×10^{-3} **	5.20×10^{-3} **	3.15×10^{-3} **	5.60×10^{-3} **	6.76×10^{-3} **	1.34×10^{-3} **	1.18×10^{-3} **	7.05×10^{-3} **
	1.95×10^{-4}	5.19×10^{-4}	5.75×10^{-4}	6.11×10^{-4}	5.36×10^{-4}	6.44×10^{-4}	4.22×10^{-4}	3.23×10^{-4}	6.35×10^{-4}	1.83×10^{-4}	4.88×10^{-4}	3.09×10^{-4}
ESG_low	6.27×10^{-2} **	-	-	-	4.57×10^{-2} **	-	-	6.90×10^{-2} **	2.55×10^{-1} **	4.40×10^{-3} **	-	1.14×10^{-1} **
	5.38×10^{-4}	-	-	-	8.97×10^{-4}	-	-	8.37×10^{-4}	3.18×10^{-3}	1.58×10^{-4}	-	1.44×10^{-3}
COVID*ESG_low	9.76×10^{-2} **	-	-	-	7.27×10^{-2} **	-	-	1.06×10^{-1} **	3.44×10^{-1} **	7.46×10^{-3} **	-	1.95×10^{-1} **
	3.35×10^{-3}	-	-	-	3.35×10^{-3}	-	-	4.07×10^{-3}	1.56×10^{-2}	4.94×10^{-4}	-	6.62×10^{-3}
ESG_high	3.26×10^{-2} **	2.03×10^{-2} **	2.20×10^{-2} **	-	2.29×10^{-2} **	1.06×10^{-2} **	8.52×10^{-3} **	2.30×10^{-2} **	5.10×10^{-2} **	2.20×10^{-2} **	1.41×10^{-1} **	3.26×10^{-2} **
	2.79×10^{-4}	2.87×10^{-4}	3.83×10^{-4}	-	4.49×10^{-4}	2.13×10^{-4}	1.40×10^{-4}	2.79×10^{-4}	6.36×10^{-4}	7.88×10^{-4}	1.60×10^{-3}	4.11×10^{-4}
COVID*ESG_high	5.07×10^{-2} **	2.69×10^{-2} **	3.23×10^{-2} **	-	3.63×10^{-2} **	1.52×10^{-2} **	1.13×10^{-2} **	3.53×10^{-2} **	6.88×10^{-2} **	3.73×10^{-2} **	1.52×10^{-1} **	5.56×10^{-2} **
	1.74×10^{-3}	1.31×10^{-3}	1.53×10^{-3}	-	1.68×10^{-3}	8.01×10^{-4}	5.85×10^{-4}	1.36×10^{-3}	3.13×10^{-3}	2.47×10^{-3}	8.69×10^{-3}	1.89×10^{-3}
Constant	7.82×10^{-3} **	1.16×10^{-2} **	1.03×10^{-2} **	1.17×10^{-2} **	8.40×10^{-3} **	9.95×10^{-3} **	8.14×10^{-3} **	8.51×10^{-3} **	1.62×10^{-2} **	1.53×10^{-3} **	1.40×10^{-2} **	7.92×10^{-3} **
	6.82×10^{-5}	1.81×10^{-4}	2.01×10^{-4}	2.13×10^{-4}	1.87×10^{-4}	2.25×10^{-4}	1.47×10^{-4}	1.13×10^{-4}	2.22×10^{-4}	6.40×10^{-5}	1.70×10^{-4}	1.08×10^{-4}
R-squared	0.0564	0.0290	0.0389	0.0346	0.0243	0.0247	0.0212	0.0261	0.0105	0.0051	0.0113	0.0280

Notes: ** refer to 5% of statistical significance.

Table A13. Panel data regression results for absolute returns and governance pillar (G) scores.

		Europe							Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
Panel A. Governance pillar score												
COVID	7.58×10^{-3} **	4.55×10^{-3} **	5.87×10^{-3} **	5.87×10^{-3} **	7.23×10^{-3} **	5.20×10^{-3} **	3.15×10^{-3} **	7.36×10^{-3} **	8.12×10^{-3} **	8.14×10^{-3} **	1.18×10^{-3} **	8.30×10^{-3} **
	2.78×10^{-4}	5.19×10^{-4}	5.75×10^{-4}	6.11×10^{-4}	6.42×10^{-4}	6.44×10^{-4}	4.22×10^{-4}	4.05×10^{-4}	7.35×10^{-4}	5.09×10^{-4}	4.88×10^{-4}	3.71×10^{-4}
ESG_low	4.17×10^{-1} **	-	-	-	-	-	-	-	-	1.95×10^{-1} **	1.41×10^{-1} **	5.28×10^{-1} **
	3.35×10^{-3}	-	-	-	-	-	-	-	-	2.21×10^{-3}	1.60×10^{-3}	6.69×10^{-3}
COVID*ESG_low	6.33×10^{-1} **	-	-	-	-	-	-	-	-	2.86×10^{-1} **	1.52×10^{-1} **	8.96×10^{-1} **
	2.21×10^{-2}	-	-	-	-	-	-	-	-	1.14×10^{-2}	8.69×10^{-3}	3.07×10^{-2}
ESG_high	9.61×10^{-2} **	6.08×10^{-2} **	1.10×10^{-2} **	-	-	1.06×10^{-2} **	1.70×10^{-2} **	5.88×10^{-2} **	1.62×10^{-1} **	1.95×10^{-1} **	1.41×10^{-1} **	8.80×10^{-2} **
	7.74×10^{-4}	8.60×10^{-4}	1.92×10^{-4}	-	-	2.13×10^{-4}	2.79×10^{-4}	6.56×10^{-4}	1.84×10^{-3}	2.21×10^{-3}	1.60×10^{-3}	1.12×10^{-3}
COVID*ESG_high	1.46×10^{-1} **	8.08×10^{-2} **	1.62×10^{-2} **	-	-	1.52×10^{-2} **	2.26×10^{-2} **	8.89×10^{-2} **	2.15×10^{-1} **	2.86×10^{-1} **	1.52×10^{-1} **	1.49×10^{-1} **
	5.11×10^{-3}	3.92×10^{-3}	7.66×10^{-4}	-	-	8.01×10^{-4}	1.17×10^{-3}	3.39×10^{-3}	9.67×10^{-3}	1.14×10^{-2}	8.69×10^{-3}	5.12×10^{-3}
Constant	1.19×10^{-2} **	1.16×10^{-2} **	1.03×10^{-2} **	1.17×10^{-2} **	1.53×10^{-2} **	9.95×10^{-3} **	8.14×10^{-3} **	1.17×10^{-2} **	2.06×10^{-2} **	1.44×10^{-2} **	1.40×10^{-2} **	9.45×10^{-3} **
	9.71×10^{-5}	1.81×10^{-4}	2.01×10^{-4}	2.13×10^{-4}	2.24×10^{-4}	2.25×10^{-4}	1.47×10^{-4}	1.41×10^{-4}	2.56×10^{-4}	1.78×10^{-4}	1.70×10^{-4}	1.29×10^{-4}
R-squared	0.0559	0.0290	0.0389	0.0346	0.0234	0.0247	0.0212	0.0285	0.0113	0.0225	0.0113	0.0271
Panel B. Management score												
COVID	7.61×10^{-3} **	4.55×10^{-3} **	5.87×10^{-3} **	5.87×10^{-3} **	7.23×10^{-3} **	5.20×10^{-3} **	3.15×10^{-3} **	7.36×10^{-3} **	8.12×10^{-3} **	8.28×10^{-3} **	1.18×10^{-3} **	8.30×10^{-3} **
	2.79×10^{-4}	5.19×10^{-4}	5.75×10^{-4}	6.11×10^{-4}	6.42×10^{-4}	6.44×10^{-4}	4.22×10^{-4}	4.05×10^{-4}	7.35×10^{-4}	5.19×10^{-4}	4.88×10^{-4}	3.71×10^{-4}
ESG_low	2.80×10^{-1} **	-	-	-	-	-	-	-	3.24×10^{-1} **	1.21×10^{-1} **	1.41×10^{-1} **	5.28×10^{-1} **
	2.24×10^{-3}	-	-	-	-	-	-	-	3.69×10^{-3}	1.35×10^{-3}	1.60×10^{-3}	6.69×10^{-3}
COVID*ESG_low	4.25×10^{-1} **	-	-	-	-	-	-	-	4.31×10^{-1} **	1.76×10^{-1} **	1.52×10^{-1} **	8.96×10^{-1} **
	1.49×10^{-2}	-	-	-	-	-	-	-	1.93×10^{-2}	7.05×10^{-3}	8.69×10^{-3}	3.07×10^{-2}
ESG_high	5.60×10^{-2} **	6.08×10^{-2} **	1.10×10^{-2} **	2.49×10^{-2} **	-	1.06×10^{-2} **	8.52×10^{-3} **	4.41×10^{-2} **	1.08×10^{-1} **	7.58×10^{-2} **	1.41×10^{-1} **	4.80×10^{-2} **
	4.48×10^{-4}	8.60×10^{-4}	1.92×10^{-4}	4.06×10^{-4}	-	2.13×10^{-4}	1.40×10^{-4}	4.92×10^{-4}	1.23×10^{-3}	8.44×10^{-4}	1.60×10^{-3}	6.08×10^{-4}
COVID*ESG_high	8.49×10^{-2} **	8.08×10^{-2} **	1.62×10^{-2} **	3.52×10^{-2} **	-	1.52×10^{-2} **	1.13×10^{-2} **	6.67×10^{-2} **	1.44×10^{-1} **	1.10×10^{-1} **	1.52×10^{-1} **	8.15×10^{-2} **
	2.97×10^{-3}	3.92×10^{-3}	7.66×10^{-4}	1.69×10^{-3}	-	8.01×10^{-4}	5.85×10^{-4}	2.54×10^{-3}	6.44×10^{-3}	4.41×10^{-3}	8.69×10^{-3}	2.79×10^{-3}
Constant	1.20×10^{-2} **	1.16×10^{-2} **	1.03×10^{-2} **	1.17×10^{-2} **	1.53×10^{-2} **	9.95×10^{-3} **	8.14×10^{-3} **	1.17×10^{-2} **	2.06×10^{-2} **	1.49×10^{-2} **	1.40×10^{-2} **	9.45×10^{-3} **
	9.72×10^{-5}	1.81×10^{-4}	2.01×10^{-4}	2.13×10^{-4}	2.24×10^{-4}	2.25×10^{-4}	1.47×10^{-4}	1.41×10^{-4}	2.56×10^{-4}	1.81×10^{-4}	1.70×10^{-4}	1.29×10^{-4}
R-squared	0.0561	0.0290	0.0389	0.0346	0.0234	0.0247	0.0212	0.0285	0.0113	0.0225	0.0113	0.0271

Table A13. *Cont.*

	Europe								Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
Panel C. Shareholders score												
COVID	7.61×10^{-3} **	4.55×10^{-3} **	5.87×10^{-3} **	5.87×10^{-3} **	7.23×10^{-3} **	5.20×10^{-3} **	3.15×10^{-3} **	7.36×10^{-3} **	8.12×10^{-3} **	8.66×10^{-3} **	1.18×10^{-3} **	8.17×10^{-3} **
	2.79×10^{-4}	5.19×10^{-4}	5.75×10^{-4}	6.11×10^{-4}	6.42×10^{-4}	6.44×10^{-4}	4.22×10^{-4}	4.05×10^{-4}	7.35×10^{-4}	5.26×10^{-4}	4.88×10^{-4}	3.65×10^{-4}
ESG_low	1.33×10^{-1} **	6.08×10^{-2} **	-	2.49×10^{-2} **	-	-	1.70×10^{-2} **	-	1.62×10^{-1} **	1.40×10^{-1} **	1.41×10^{-1} **	1.23×10^{-1} **
	1.06×10^{-3}	8.60×10^{-4}	-	4.06×10^{-4}	-	-	2.79×10^{-4}	-	1.84×10^{-3}	1.58×10^{-3}	1.60×10^{-3}	1.51×10^{-3}
COVID*ESG_low	2.01×10^{-1} **	8.08×10^{-2} **	-	3.52×10^{-2} **	-	-	2.26×10^{-2} **	-	2.15×10^{-1} **	2.06×10^{-1} **	1.52×10^{-1} **	2.05×10^{-1} **
	7.04×10^{-3}	3.92×10^{-3}	-	1.69×10^{-3}	-	-	1.17×10^{-3}	-	9.67×10^{-3}	8.15×10^{-3}	8.69×10^{-3}	7.08×10^{-3}
ESG_high	5.48×10^{-2} **	6.08×10^{-2} **	1.10×10^{-2} **	-	4.04×10^{-2} **	1.06×10^{-2} **	-	5.88×10^{-2} **	5.40×10^{-2} **	1.40×10^{-1} **	1.41×10^{-1} **	4.24×10^{-2} **
	4.38×10^{-4}	8.60×10^{-4}	1.92×10^{-4}	-	5.38×10^{-4}	2.13×10^{-4}	-	6.56×10^{-4}	6.15×10^{-4}	1.58×10^{-3}	1.60×10^{-3}	5.21×10^{-4}
COVID*ESG_high	8.31×10^{-2} **	8.08×10^{-2} **	1.62×10^{-2} **	-	5.62×10^{-2} **	1.52×10^{-2} **	-	8.89×10^{-2} **	7.18×10^{-2} **	2.06×10^{-1} **	1.52×10^{-1} **	7.11×10^{-2} **
	2.91×10^{-3}	3.92×10^{-3}	7.66×10^{-4}	-	2.52×10^{-3}	8.01×10^{-4}	-	3.39×10^{-3}	3.22×10^{-3}	8.15×10^{-3}	8.69×10^{-3}	2.45×10^{-3}
Constant	1.20×10^{-2} **	1.16×10^{-2} **	1.03×10^{-2} **	1.17×10^{-2} **	1.53×10^{-2} **	9.95×10^{-3} **	8.14×10^{-3} **	1.17×10^{-2} **	2.06×10^{-2} **	1.49×10^{-2} **	1.40×10^{-2} **	9.61×10^{-3} **
	9.72×10^{-5}	1.81×10^{-4}	2.01×10^{-4}	2.13×10^{-4}	2.24×10^{-4}	2.25×10^{-4}	1.47×10^{-4}	1.41×10^{-4}	2.56×10^{-4}	1.83×10^{-4}	1.70×10^{-4}	1.27×10^{-4}
R-squared	0.0561	0.0290	0.0389	0.0346	0.0234	0.0247	0.0212	0.0285	0.0113	0.0238	0.0113	0.0272
Panel D. CSR strategy score												
COVID	7.61×10^{-3} **	4.55×10^{-3} **	5.87×10^{-3} **	5.87×10^{-3} **	7.23×10^{-3} **	5.20×10^{-3} **	3.15×10^{-3} **	7.36×10^{-3} **	8.12×10^{-3} **	8.41×10^{-3} **	1.18×10^{-3} **	8.25×10^{-3} **
	2.79×10^{-4}	5.19×10^{-4}	5.75×10^{-4}	6.11×10^{-4}	6.42×10^{-4}	6.44×10^{-4}	4.22×10^{-4}	4.05×10^{-4}	7.35×10^{-4}	5.25×10^{-4}	4.88×10^{-4}	3.69×10^{-4}
ESG_low	7.19×10^{-2} **	-	-	-	8.07×10^{-2}	-	-	8.81×10^{-2} **	8.09×10^{-2} **	4.59×10^{-2} **	-	7.07×10^{-2} **
	5.76×10^{-4}	-	-	-	1.08×10^{-3}	-	-	9.84×10^{-4}	9.22×10^{-4}	5.13×10^{-4}	-	8.97×10^{-4}
COVID*ESG_low	1.09×10^{-1} **	-	-	-	1.12×10^{-1}	-	-	1.33×10^{-1} **	1.08×10^{-1} **	6.70×10^{-2} **	-	1.20×10^{-1} **
	3.82×10^{-3}	-	-	-	5.03×10^{-3}	-	-	5.08×10^{-3}	4.83×10^{-3}	2.67×10^{-3}	-	4.12×10^{-3}
ESG_high	3.81×10^{-2} **	6.08×10^{-2} **	1.10×10^{-2} **	-	-	1.06×10^{-2} **	1.70×10^{-2} **	3.53×10^{-2} **	6.48×10^{-2} **	8.53×10^{-2} **	3.53×10^{-2} **	2.65×10^{-2} **
	3.06×10^{-4}	8.60×10^{-4}	1.92×10^{-4}	-	-	2.13×10^{-4}	2.79×10^{-4}	3.94×10^{-4}	7.38×10^{-4}	9.52×10^{-4}	3.99×10^{-4}	3.36×10^{-4}
COVID*ESG_high	5.78×10^{-2} **	8.08×10^{-2} **	1.62×10^{-2} **	-	-	1.52×10^{-2} **	2.26×10^{-2} **	5.34×10^{-2} **	8.62×10^{-2} **	1.24×10^{-1} **	3.79×10^{-2} **	4.50×10^{-2} **
	2.02×10^{-3}	3.92×10^{-3}	7.66×10^{-4}	-	-	8.01×10^{-4}	1.17×10^{-3}	2.03×10^{-3}	3.87×10^{-3}	4.96×10^{-3}	2.17×10^{-3}	1.54×10^{-3}
Constant	1.20×10^{-2} **	1.16×10^{-2} **	1.03×10^{-2} **	1.17×10^{-2} **	1.53×10^{-2} **	9.95×10^{-3} **	8.14×10^{-3} **	1.17×10^{-2} **	2.06×10^{-2} **	1.51×10^{-2} **	1.40×10^{-2} **	9.39×10^{-3} **
	9.73×10^{-5}	1.81×10^{-4}	2.01×10^{-4}	2.13×10^{-4}	2.24×10^{-4}	2.25×10^{-4}	1.47×10^{-4}	1.41×10^{-4}	2.56×10^{-4}	1.83×10^{-4}	1.70×10^{-4}	1.29×10^{-4}
R-squared	0.0560	0.0290	0.0389	0.0346	0.0234	0.0247	0.0212	0.0285	0.0113	0.0226	0.0113	0.0270

Notes: ** refer to 5% of statistical significance.

Table A14. Panel data regression results for absolute returns and controversies score.

		Europe							Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
COVID	7.66×10^{-3} **	4.55×10^{-3} **	5.87×10^{-3} **	5.87×10^{-3} **	7.23×10^{-3} **	5.20×10^{-3} **	3.15×10^{-3} **	7.30×10^{-3} **	8.12×10^{-3} **	8.57×10^{-3} **	1.18×10^{-3} **	8.29×10^{-3} **
	2.81×10^{-4}	5.19×10^{-4}	5.75×10^{-4}	6.11×10^{-4}	6.42×10^{-4}	6.44×10^{-4}	4.22×10^{-4}	3.99×10^{-4}	7.35×10^{-4}	5.08×10^{-4}	4.88×10^{-4}	3.71×10^{-4}
ESG_low	3.17×10^{-1} **	-	-	-	-	-	1.70×10^{-2} **	-	3.24×10^{-1} **	-	-	1.79×10^{-1} **
	2.54×10^{-3}	-	-	-	-	-	2.79×10^{-4}	-	3.69×10^{-3}	-	-	2.23×10^{-3}
COVID*ESG_low	4.81×10^{-1} **	-	-	-	-	-	2.26×10^{-2} **	-	4.31×10^{-1} **	-	-	3.01×10^{-1} **
	1.68×10^{-2}	-	-	-	-	-	1.17×10^{-3}	-	1.93×10^{-2}	-	-	1.04×10^{-2}
ESG_high	2.11×10^{-2} **	2.03×10^{-2} **	-	1.24×10^{-2} **	1.61×10^{-2} **	-	-	2.69×10^{-2} **	2.49×10^{-2} **	1.83×10^{-2} **	1.77×10^{-2} **	2.19×10^{-2} **
	1.70×10^{-4}	2.87×10^{-4}	-	2.03×10^{-4}	2.15×10^{-4}	-	-	3.01×10^{-4}	2.84×10^{-4}	2.01×10^{-4}	2.00×10^{-4}	2.73×10^{-4}
COVID*ESG_high	3.21×10^{-2} **	2.69×10^{-2} **	-	1.76×10^{-2} **	2.25×10^{-2} **	-	-	4.08×10^{-2} **	3.31×10^{-2} **	2.69×10^{-2} **	1.89×10^{-2} **	3.69×10^{-2} **
	1.12×10^{-3}	1.31×10^{-3}	-	8.44×10^{-4}	1.01×10^{-3}	-	-	1.55×10^{-3}	1.49×10^{-3}	1.06×10^{-3}	1.09×10^{-3}	1.27×10^{-3}
Constant	1.21×10^{-2} **	1.16×10^{-2} **	1.03×10^{-2} **	1.17×10^{-2} **	1.53×10^{-2} **	9.95×10^{-3} **	8.14×10^{-3} **	1.15×10^{-2} **	2.06×10^{-2} **	1.49×10^{-2} **	1.40×10^{-2} **	9.61×10^{-3} **
	9.81×10^{-5}	1.81×10^{-4}	2.01×10^{-4}	2.13×10^{-4}	2.24×10^{-4}	2.25×10^{-4}	1.47×10^{-4}	1.39×10^{-4}	2.56×10^{-4}	1.77×10^{-4}	1.70×10^{-4}	1.29×10^{-4}
R-squared	0.0559	0.0290	0.0389	0.0346	0.0234	0.0247	0.0212	0.0287	0.0113	0.0249	0.0113	0.0271

Notes: ** refer to 5% of statistical significance.

Table A15. Panel data regression results for risk-adjusted returns and overall ESG scores.

		Europe							Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
						Panel A. ESG combined score						
COVID	1.10×10^{-3} 1.97×10^{-3}	1.64×10^{-3} 4.34×10^{-3}	1.71×10^{-3} 5.36×10^{-3}	-1.37×10^{-3} 4.97×10^{-3}	1.58×10^{-3} 4.02×10^{-3}	-4.28×10^{-3} 6.11×10^{-3}	-2.64×10^{-3} 5.68×10^{-3}	-4.88×10^{-4} 3.43×10^{-3}	5.04×10^{-3} 5.80×10^{-3}	5.33×10^{-3} 3.28×10^{-3}	-2.26×10^{-3} 4.32×10^{-3}	-4.19×10^{-4} 3.33×10^{-3}
ESG_low	1.26×10^{-1} ** 1.57×10^{-2}	- -	- -	- -	- -	- -	- -	- -	2.74×10^{-2} 2.84×10^{-2}	2.45×10^{-2} ** 8.16×10^{-3}	- -	3.45×10^{-1} ** 5.50×10^{-2}
COVID*ESG_low	1.50×10^{-1} ** 4.55×10^{-2}	- -	- -	- -	- -	- -	- -	- -	9.37×10^{-2} 8.15×10^{-2}	6.00×10^{-2} ** 2.34×10^{-2}	- -	3.26×10^{-1} ** 1.59×10^{-1}
ESG_high	2.02×10^{-1} ** 2.52×10^{-2}	3.25×10^{-2} ** 7.10×10^{-3}	1.05×10^{-2} ** 3.51×10^{-3}	- -	- -	- -	1.22×10^{-2} ** 3.71×10^{-3}	- -	2.74×10^{-2} 2.84×10^{-2}	- -	- -	6.90×10^{-1} ** 1.10×10^{-1}
COVID*ESG_high	2.39×10^{-1} ** 7.29×10^{-2}	3.97×10^{-2} * 2.04×10^{-2}	1.35×10^{-2} 1.01×10^{-2}	- -	- -	- -	7.55×10^{-3} 1.07×10^{-2}	- -	9.37×10^{-2} 8.15×10^{-2}	- -	- -	6.53×10^{-1} ** 3.18×10^{-1}
Constant	5.04×10^{-3} ** 6.89×10^{-4}	6.30×10^{-3} ** 1.52×10^{-3}	5.03×10^{-3} ** 1.87×10^{-3}	4.47×10^{-3} ** 1.73×10^{-3}	3.54×10^{-3} ** 1.40×10^{-3}	5.53×10^{-3} ** 2.13×10^{-3}	6.41×10^{-3} ** 1.98×10^{-3}	3.93×10^{-3} ** 1.20×10^{-3}	1.21×10^{-3} 2.02×10^{-3}	2.57×10^{-3} ** 1.15×10^{-3}	3.11×10^{-3} ** 1.51×10^{-3}	6.88×10^{-3} ** 1.16×10^{-3}
R-squared	0.0317	0.0147	0.0104	0.0080	0.0160	0.0255	0.0224	0.0213	0.0260	0.0272	0.0283	0.0160
						Panel B. ESG score						
COVID	1.05×10^{-3} 1.97×10^{-3}	1.65×10^{-3} 4.34×10^{-3}	1.71×10^{-3} 5.36×10^{-3}	-1.34×10^{-3} 4.97×10^{-3}	1.57×10^{-3} 4.02×10^{-3}	-4.28×10^{-3} 6.11×10^{-3}	-2.64×10^{-3} 5.68×10^{-3}	-4.84×10^{-4} 3.43×10^{-3}	4.92×10^{-3} 5.75×10^{-3}	5.32×10^{-3} 3.28×10^{-3}	-2.25×10^{-3} 4.32×10^{-3}	-4.79×10^{-4} 3.33×10^{-3}
ESG_low	1.44×10^{-1} ** 1.80×10^{-2}	- -	- -	- -	- -	- -	- -	- -	- -	2.45×10^{-2} ** 8.16×10^{-3}	- -	3.45×10^{-1} ** 5.50×10^{-2}
COVID*ESG_low	1.70×10^{-1} ** 5.21×10^{-2}	- -	- -	- -	- -	- -	- -	- -	- -	6.00×10^{-2} 2.34×10^{-2}	- -	3.24×10^{-1} ** 1.59×10^{-1}
ESG_high	6.74×10^{-2} ** 8.39×10^{-3}	- -	5.24×10^{-3} ** 1.75×10^{-3}	- -	- -	5.00×10^{-3} ** 2.00×10^{-3}	6.09×10^{-3} ** 1.86×10^{-3}	1.80×10^{-2} ** 5.24×10^{-3}	- -	- -	- -	9.86×10^{-2} ** 1.57×10^{-2}
COVID*ESG_high	7.95×10^{-2} ** 2.43×10^{-2}	- -	6.74×10^{-3} 5.03×10^{-3}	- -	- -	1.24×10^{-3} 5.73×10^{-3}	3.78×10^{-3} 5.33×10^{-3}	1.61×10^{-2} 1.50×10^{-2}	- -	- -	- -	9.25×10^{-2} ** 4.54×10^{-2}
Constant	5.06×10^{-3} ** 6.89×10^{-4}	6.29×10^{-3} ** 1.52×10^{-3}	5.03×10^{-3} ** 1.87×10^{-3}	4.45×10^{-3} ** 1.73×10^{-3}	3.54×10^{-3} ** 1.40×10^{-3}	5.53×10^{-3} ** 2.13×10^{-3}	6.41×10^{-3} ** 1.98×10^{-3}	3.92×10^{-3} ** 1.20×10^{-3}	1.33×10^{-3} 2.00×10^{-3}	2.58×10^{-3} ** 1.15×10^{-3}	3.10×10^{-3} ** 1.51×10^{-3}	6.89×10^{-3} ** 1.16×10^{-3}
R-squared	0.0296	0.0149	0.0104	0.0075	0.0160	0.0127	0.0224	0.0040	0.0114	0.0170	0.0140	0.0213

Notes: ** and * refer to 5% and 10% levels of statistical significance, respectively.

Table A16. Panel data regression results for risk-adjusted returns and environmental (E) scores.

		Europe							Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
Panel A. Environmental pillar score												
COVID	1.09×10^{-3} 1.97×10^{-3}	1.65×10^{-3} 4.34×10^{-3}	1.71×10^{-3} 5.36×10^{-3}	-1.35×10^{-3} 4.97×10^{-3}	1.57×10^{-3} 4.02×10^{-3}	-4.28×10^{-3} 6.11×10^{-3}	-2.64×10^{-3} 5.68×10^{-3}	-4.84×10^{-4} 3.43×10^{-3}	4.96×10^{-3} 5.76×10^{-3}	5.06×10^{-3} 3.14×10^{-3}	-2.25×10^{-3} 4.32×10^{-3}	-3.78×10^{-4} 3.30×10^{-3}
ESG_low	3.26×10^{-2} ** 4.06×10^{-3}	- -	- -	- -	- -	- -	- -	2.71×10^{-2} ** 7.85×10^{-3}	1.42×10^{-2} 1.41×10^{-2}	7.32×10^{-3} ** 2.22×10^{-3}	- -	7.56×10^{-2} ** 1.20×10^{-2}
COVID*ESG_low	3.86×10^{-2} ** 1.18×10^{-2}	- -	- -	- -	- -	- -	- -	2.41×10^{-2} 2.26×10^{-2}	4.69×10^{-2} 4.05×10^{-2}	1.70×10^{-2} ** 6.37×10^{-3}	- -	7.19×10^{-2} ** 3.45×10^{-2}
ESG_high	3.06×10^{-2} ** 3.81×10^{-3}	3.25×10^{-2} ** 7.10×10^{-3}	5.24×10^{-3} ** 1.75×10^{-3}	- -	- -	5.00×10^{-3} ** 2.00×10^{-3}	6.09×10^{-3} ** 1.86×10^{-3}	1.35×10^{-2} ** 3.93×10^{-3}	9.45×10^{-3} 9.42×10^{-3}	4.39×10^{-2} ** 1.33×10^{-2}	1.42×10^{-2} ** 7.07×10^{-3}	4.54×10^{-2} ** 7.18×10^{-3}
COVID*ESG_high	3.63×10^{-2} ** 1.10×10^{-2}	3.97×10^{-2} * 2.04×10^{-2}	6.74×10^{-3} 5.03×10^{-3}	- -	- -	1.24×10^{-3} 5.73×10^{-3}	3.78×10^{-3} 5.33×10^{-3}	1.20×10^{-2} 1.13×10^{-2}	3.12×10^{-2} 2.70×10^{-2}	1.02×10^{-1} ** 3.82×10^{-2}	4.29×10^{-3} 2.03×10^{-2}	4.32×10^{-2} ** 2.07×10^{-2}
Constant	5.05×10^{-3} ** 6.89×10^{-4}	6.29×10^{-3} ** 1.52×10^{-3}	5.03×10^{-3} ** 1.87×10^{-3}	4.45×10^{-3} ** 1.73×10^{-3}	3.55×10^{-3} ** 1.40×10^{-3}	5.53×10^{-3} ** 2.13×10^{-3}	6.41×10^{-3} ** 1.98×10^{-3}	3.92×10^{-3} ** 1.20×10^{-3}	1.29×10^{-3} 2.01×10^{-3}	2.76×10^{-3} ** 1.09×10^{-3}	3.10×10^{-3} ** 1.51×10^{-3}	6.85×10^{-3} ** 1.15×10^{-3}
R-squared	0.0197	0.0093	0.0065	0.0048	0.0098	0.0318	0.0140	0.0013	0.0048	0.0168	0.0105	0.0200
Panel B. Resource use score												
COVID	1.11×10^{-3} 1.98×10^{-3}	1.64×10^{-3} 4.34×10^{-3}	1.71×10^{-3} 5.36×10^{-3}	-1.37×10^{-3} 4.97×10^{-3}	1.56×10^{-3} 4.02×10^{-3}	-4.28×10^{-3} 6.11×10^{-3}	-2.64×10^{-3} 5.68×10^{-3}	-4.82×10^{-4} 3.43×10^{-3}	5.15×10^{-3} 5.86×10^{-3}	5.33×10^{-3} 3.28×10^{-3}	-2.26×10^{-3} 4.32×10^{-3}	-4.10×10^{-4} ** 3.33×10^{-3}
ESG_low	3.25×10^{-2} ** 4.06×10^{-3}	- -	- -	- -	- -	- -	- -	2.70×10^{-2} ** 7.86×10^{-3}	8.62×10^{-3} 9.58×10^{-3}	8.16×10^{-3} ** 2.72×10^{-3}	- -	6.26×10^{-2} ** 1.00×10^{-2}
COVID*ESG_low	3.86×10^{-2} ** 1.18×10^{-2}	- -	- -	- -	- -	- -	- -	2.41×10^{-2} 2.26×10^{-2}	3.12×10^{-2} 2.74×10^{-2}	2.00×10^{-2} ** 7.80×10^{-3}	- -	5.93×10^{-2} ** 2.89×10^{-2}
ESG_high	1.57×10^{-2} ** 1.97×10^{-3}	8.13×10^{-3} ** 1.77×10^{-3}	5.24×10^{-3} ** 1.75×10^{-3}	- -	- -	5.00×10^{-3} ** 2.00×10^{-3}	6.09×10^{-3} ** 1.86×10^{-3}	9.01×10^{-3} ** 2.62×10^{-3}	3.69×10^{-3} 4.10×10^{-3}	4.08×10^{-2} ** 1.36×10^{-2}	9.47×10^{-3} ** 4.71×10^{-3}	1.91×10^{-2} ** 3.06×10^{-3}
COVID*ESG_high	1.87×10^{-2} ** 5.70×10^{-3}	9.93×10^{-3} * 5.10×10^{-3}	6.74×10^{-3} 5.03×10^{-3}	- -	- -	1.24×10^{-3} 5.73×10^{-3}	3.78×10^{-3} 5.33×10^{-3}	8.03×10^{-3} 7.52×10^{-3}	1.34×10^{-2} 1.18×10^{-2}	1.00×10^{-1} ** 3.90×10^{-2}	2.86×10^{-3} 1.35×10^{-2}	1.81×10^{-2} ** 8.82×10^{-3}
Constant	5.03×10^{-3} ** 6.89×10^{-4}	6.30×10^{-3} ** 1.52×10^{-3}	5.03×10^{-3} ** 1.87×10^{-3}	4.47×10^{-3} ** 1.73×10^{-3}	3.56×10^{-3} ** 1.40×10^{-3}	5.53×10^{-3} ** 2.13×10^{-3}	6.41×10^{-3} ** 1.98×10^{-3}	3.92×10^{-3} ** 1.20×10^{-3}	1.10×10^{-3} 2.04×10^{-3}	2.57×10^{-3} ** 1.15×10^{-3}	3.12×10^{-3} ** 1.51×10^{-3}	6.87×10^{-3} ** 1.16×10^{-3}
R-squared	0.0203	0.0092	0.0065	0.0050	0.0097	0.0191	0.0140	0.0013	0.0050	0.0170	0.0106	0.0240

Table A16. *Cont.*

	Europe								Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
Panel C. Emissions score												
COVID	1.09×10^{-3} 1.97×10^{-3}	1.65×10^{-3} 4.34×10^{-3}	1.72×10^{-3} 5.36×10^{-3}	-1.34×10^{-3} 4.97×10^{-3}	1.57×10^{-3} 4.02×10^{-3}	-4.28×10^{-3} 6.11×10^{-3}	-2.62×10^{-3} 5.67×10^{-3}	-4.81×10^{-4} 3.43×10^{-3}	4.96×10^{-3} 5.76×10^{-3}	5.18×10^{-3} 3.21×10^{-3}	-2.25×10^{-3} 4.32×10^{-3}	-3.68×10^{-4} 3.30×10^{-3}
ESG_low	3.89×10^{-2} ** 4.84×10^{-3}	- -	- -	- -	- -	- -	- -	- -	9.47×10^{-3} 9.42×10^{-3}	9.56×10^{-3} ** 3.07×10^{-3}	- -	6.88×10^{-2} ** 1.09×10^{-2}
COVID*ESG_low	4.60×10^{-2} ** 1.40×10^{-2}	- -	- -	- -	- -	- -	- -	- -	3.12×10^{-2} 2.70×10^{-2}	2.29×10^{-2} ** 8.81×10^{-3}	- -	6.56×10^{-2} ** 3.14×10^{-2}
ESG_high	5.98×10^{-3} ** 7.45×10^{-4}	6.49×10^{-3} ** 1.42×10^{-3}	5.23×10^{-3} ** 1.75×10^{-3}	4.28×10^{-3} ** 1.62×10^{-3}	3.74×10^{-3} ** 1.31×10^{-3}	5.01×10^{-3} ** 2.00×10^{-3}	6.08×10^{-3} ** 1.85×10^{-3}	3.86×10^{-3} ** 1.12×10^{-3}	2.37×10^{-3} 2.35×10^{-3}	4.97×10^{-3} ** 1.60×10^{-3}	2.83×10^{-3} ** 1.41×10^{-3}	7.56×10^{-3} ** 1.20×10^{-3}
COVID*ESG_high	7.08×10^{-3} ** 2.16×10^{-3}	7.94×10^{-3} * 4.08×10^{-3}	6.74×10^{-3} 5.03×10^{-3}	3.10×10^{-3} 4.66×10^{-3}	5.12×10^{-3} 3.77×10^{-3}	1.24×10^{-3} 5.73×10^{-3}	3.78×10^{-3} 5.33×10^{-3}	3.44×10^{-3} 3.22×10^{-3}	7.81×10^{-3} 6.75×10^{-3}	1.19×10^{-2} ** 4.58×10^{-3}	8.58×10^{-4} 4.05×10^{-3}	7.20×10^{-3} ** 3.45×10^{-3}
Constant	5.05×10^{-3} ** 6.89×10^{-4}	6.29×10^{-3} ** 1.52×10^{-3}	5.02×10^{-3} ** 1.87×10^{-3}	4.45×10^{-3} ** 1.73×10^{-3}	3.55×10^{-3} ** 1.40×10^{-3}	5.53×10^{-3} ** 2.13×10^{-3}	6.39×10^{-3} ** 1.98×10^{-3}	3.92×10^{-3} ** 1.20×10^{-3}	1.29×10^{-3} 2.01×10^{-3}	2.64×10^{-3} ** 1.12×10^{-3}	3.10×10^{-3} ** 1.51×10^{-3}	6.86×10^{-3} ** 1.15×10^{-3}
R-squared	0.0256	0.0093	0.0067	0.0047	0.0098	0.0191	0.0138	0.0013	0.0048	0.0168	0.0105	0.0200
Panel D. Innovation score												
COVID	1.09×10^{-3} 1.97×10^{-3}	1.65×10^{-3} 4.34×10^{-3}	1.72×10^{-3} 5.36×10^{-3}	-1.34×10^{-3} 4.97×10^{-3}	1.57×10^{-3} 4.02×10^{-3}	-4.28×10^{-3} 6.11×10^{-3}	-2.60×10^{-3} 5.67×10^{-3}	-4.82×10^{-4} 3.43×10^{-3}	4.96×10^{-3} 5.76×10^{-3}	5.41×10^{-3} 3.29×10^{-3}	-2.25×10^{-3} 4.32×10^{-3}	-3.94×10^{-4} 3.30×10^{-3}
ESG_low	1.16×10^{-2} ** 1.45×10^{-3}	3.24×10^{-2} ** 7.10×10^{-3}	- -	- -	1.87×10^{-2} ** 6.57×10^{-3}	- -	1.21×10^{-2} ** 3.71×10^{-3}	9.01×10^{-3} ** 2.62×10^{-3}	4.73×10^{-3} 4.71×10^{-3}	4.04×10^{-3} ** 1.37×10^{-3}	9.43×10^{-3} ** 4.71×10^{-3}	1.74×10^{-2} ** 2.75×10^{-3}
COVID*ESG_low	1.38×10^{-2} ** 4.19×10^{-3}	3.97×10^{-2} * 2.04×10^{-2}	- -	- -	2.56×10^{-2} 1.88×10^{-2}	- -	7.55×10^{-3} 1.06×10^{-2}	8.03×10^{-3} 7.52×10^{-3}	1.56×10^{-2} 1.35×10^{-2}	1.01×10^{-2} ** 3.94×10^{-3}	2.86×10^{-3} 1.35×10^{-2}	1.65×10^{-2} ** 7.94×10^{-3}
ESG_high	7.22×10^{-2} ** 8.99×10^{-3}	- -	- -	- -	- -	- -	- -	5.41×10^{-2} ** 1.57×10^{-2}	9.46×10^{-3} 9.42×10^{-3}	5.86×10^{-2} ** 1.99×10^{-2}	- -	8.69×10^{-2} ** 1.38×10^{-2}
COVID*ESG_high	8.55×10^{-2} ** 2.60×10^{-2}	- -	- -	- -	- -	- -	- -	4.82×10^{-2} 4.51×10^{-2}	3.12×10^{-2} 2.70×10^{-2}	1.47×10^{-1} ** 5.71×10^{-2}	- -	8.25×10^{-2} ** 3.97×10^{-2}
Constant	5.05×10^{-3} ** 6.89×10^{-4}	6.29×10^{-3} ** 1.52×10^{-3}	5.02×10^{-3} ** 1.87×10^{-3}	4.45×10^{-3} ** 1.73×10^{-3}	3.54×10^{-3} ** 1.40×10^{-3}	5.53×10^{-3} ** 2.13×10^{-3}	6.38×10^{-3} ** 1.98×10^{-3}	3.92×10^{-3} ** 1.20×10^{-3}	1.29×10^{-3} 2.01×10^{-3}	2.51×10^{-3} ** 1.15×10^{-3}	3.10×10^{-3} ** 1.51×10^{-3}	6.86×10^{-3} ** 1.15×10^{-3}
R-squared	0.025566667	0.009333333	0.006666667	0.004666667	0.009833333	0.0191	0.013666667	0.001333333	0.0048	0.01745	0.0105	0.024

Notes: ** and * refer to 5% and 10% levels of statistical significance, respectively.

Table A17. Panel data regression results for risk-adjusted returns and social pillar (S) scores.

		Europe							Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
Panel A. Social pillar score												
COVID	9.87×10^{-4} 1.94×10^{-3}	1.65×10^{-3} 4.34×10^{-3}	1.72×10^{-3} 5.36×10^{-3}	-2.53×10^{-3} 4.28×10^{-3}	2.06×10^{-3} 3.49×10^{-3}	-4.28×10^{-3} 6.11×10^{-3}	-2.62×10^{-3} 5.67×10^{-3}	-6.18×10^{-4} 3.19×10^{-3}	4.67×10^{-3} 5.73×10^{-3}	5.08×10^{-3} * 3.06×10^{-3}	-2.24×10^{-3} 4.32×10^{-3}	-3.96×10^{-4} 3.06×10^{-3}
ESG_low	1.15×10^{-1} ** 1.41×10^{-2}	- -	- -	- -	- -	- -	- -	5.17×10^{-2} ** 1.46×10^{-2}	2.97×10^{-2} 2.81×10^{-2}	2.75×10^{-2} ** 7.61×10^{-3}	- -	3.47×10^{-1} ** 5.29×10^{-2}
COVID*ESG_low	1.34×10^{-1} ** 4.08×10^{-2}	- -	- -	- -	- -	- -	- -	4.42×10^{-2} 4.19×10^{-2}	9.12×10^{-2} 8.06×10^{-2}	6.14×10^{-2} ** 2.18×10^{-2}	- -	3.29×10^{-1} ** 1.53×10^{-1}
ESG_high	2.80×10^{-2} ** 3.43×10^{-3}	1.08×10^{-2} ** 2.37×10^{-3}	5.23×10^{-3} ** 1.75×10^{-3}	- -	2.23×10^{-2} ** 5.70×10^{-3}	5.01×10^{-3} ** 2.00×10^{-3}	6.08×10^{-3} ** 1.85×10^{-3}	1.72×10^{-2} ** 4.87×10^{-3}	9.90×10^{-3} 9.38×10^{-3}	6.88×10^{-2} ** 1.90×10^{-2}	- -	3.47×10^{-2} ** 5.29×10^{-3}
COVID*ESG_high	3.27×10^{-2} ** 9.93×10^{-3}	1.32×10^{-2} ** 6.80×10^{-3}	6.74×10^{-3} 5.03×10^{-3}	- -	3.14×10^{-2} * 1.64×10^{-2}	1.24×10^{-3} 5.73×10^{-3}	3.78×10^{-3} 5.33×10^{-3}	1.47×10^{-2} 1.40×10^{-2}	3.04×10^{-2} 2.69×10^{-2}	1.54×10^{-1} ** 5.46×10^{-2}	- -	3.29×10^{-2} ** 1.53×10^{-2}
Constant	5.06×10^{-3} ** 6.77×10^{-4}	6.29×10^{-3} ** 1.52×10^{-3}	5.02×10^{-3} ** 1.87×10^{-3}	6.35×10^{-3} ** 1.49×10^{-3}	4.22×10^{-3} ** 1.22×10^{-3}	5.53×10^{-3} ** 2.13×10^{-3}	6.39×10^{-3} ** 1.98×10^{-3}	3.77×10^{-3} ** 1.11×10^{-3}	1.41×10^{-3} 2.00×10^{-3}	3.00×10^{-3} ** 1.07×10^{-3}	3.10×10^{-3} ** 1.51×10^{-3}	6.60×10^{-3} ** 1.07×10^{-3}
R-squared	0.0219	0.0093	0.0067	0.0227	0.0225	0.0191	0.0138	0.0025	0.0043	0.0178	0.0104	0.0257
Panel B. Workforce score												
COVID	9.30×10^{-4} 1.99×10^{-3}	1.65×10^{-3} 4.34×10^{-3}	1.72×10^{-3} 5.36×10^{-3}	7.80×10^{-4} 3.89×10^{-3}	1.57×10^{-3} 4.02×10^{-3}	-4.28×10^{-3} 6.11×10^{-3}	-2.59×10^{-3} 5.67×10^{-3}	-7.93×10^{-4} 3.33×10^{-3}	4.96×10^{-3} 5.76×10^{-3}	4.74×10^{-3} 3.05×10^{-3}	-2.25×10^{-3} 4.32×10^{-3}	-4.53×10^{-4} 3.27×10^{-3}
ESG_low	9.64×10^{-2} ** 1.18×10^{-2}	- -	- -	- -	- -	- -	- -	- -	2.84×10^{-2} 2.83×10^{-2}	2.71×10^{-2} ** 7.59×10^{-3}	- -	1.45×10^{-1} ** 2.25×10^{-2}
COVID*ESG_low	1.11×10^{-1} ** 3.43×10^{-2}	- -	- -	- -	- -	- -	- -	- -	9.37×10^{-2} 8.10×10^{-2}	5.88×10^{-2} ** 2.18×10^{-2}	- -	1.36×10^{-1} ** 6.49×10^{-2}
ESG_high	1.41×10^{-2} ** 1.73×10^{-3}	6.49×10^{-3} ** 1.42×10^{-3}	5.23×10^{-3} ** 1.75×10^{-3}	1.00×10^{-2} ** 3.81×10^{-3}	4.67×10^{-3} ** 1.64×10^{-3}	5.01×10^{-3} ** 2.00×10^{-3}	6.05×10^{-3} ** 1.85×10^{-3}	6.15×10^{-3} ** 1.69×10^{-3}	4.06×10^{-3} 4.04×10^{-3}	2.71×10^{-2} ** 7.59×10^{-3}	7.07×10^{-3} ** 3.53×10^{-3}	2.07×10^{-2} ** 3.21×10^{-3}
COVID*ESG_high	1.63×10^{-2} ** 5.03×10^{-3}	7.94×10^{-3} * 4.08×10^{-3}	6.74×10^{-3} 5.03×10^{-3}	1.21×10^{-2} 1.09×10^{-2}	6.40×10^{-3} 4.71×10^{-3}	1.24×10^{-3} 5.73×10^{-3}	3.78×10^{-3} 5.32×10^{-3}	5.07×10^{-3} 4.87×10^{-3}	1.34×10^{-2} 1.16×10^{-2}	5.88×10^{-2} ** 2.18×10^{-2}	2.14×10^{-3} 1.01×10^{-2}	1.95×10^{-2} ** 9.27×10^{-3}
Constant	5.19×10^{-3} ** 6.94×10^{-4}	6.29×10^{-3} ** 1.52×10^{-3}	5.02×10^{-3} ** 1.87×10^{-3}	3.24×10^{-3} ** 1.36×10^{-3}	3.54×10^{-3} ** 1.40×10^{-3}	5.53×10^{-3} ** 2.13×10^{-3}	6.36×10^{-3} ** 1.98×10^{-3}	4.05×10^{-3} ** 1.16×10^{-3}	1.29×10^{-3} 2.01×10^{-3}	2.99×10^{-3} ** 1.07×10^{-3}	3.10×10^{-3} ** 1.51×10^{-3}	6.95×10^{-3} ** 1.14×10^{-3}
R-squared	0.0255	0.0093	0.0067	0.0027	0.0100	0.0191	0.0135	0.0037	0.0048	0.0156	0.0105	0.0257

Table A17. *Cont.*

	Europe								Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
Panel C. Human rights score												
COVID	9.92×10^{-4} 2.01×10^{-3}	1.64×10^{-3} 4.34×10^{-3}	1.71×10^{-3} 5.36×10^{-3}	-1.37×10^{-3} 4.97×10^{-3}	1.58×10^{-3} 4.02×10^{-3}	-4.28×10^{-3} 6.11×10^{-3}	-2.64×10^{-3} 5.68×10^{-3}	-4.85×10^{-4} 3.43×10^{-3}	5.04×10^{-3} 5.80×10^{-3}	5.21×10^{-3} 3.21×10^{-3}	-2.25×10^{-3} 4.32×10^{-3}	-4.99×10^{-4} 3.32×10^{-3}
ESG_low	1.53×10^{-2} ** 1.90×10^{-3}	- -	- -	- -	- -	- -	- -	1.08×10^{-2} ** 3.14×10^{-3}	1.37×10^{-2} 1.42×10^{-2}	5.21×10^{-3} ** 1.66×10^{-3}	7.09×10^{-3} ** 3.53×10^{-3}	2.15×10^{-2} ** 3.38×10^{-3}
COVID*ESG_low	1.78×10^{-2} ** 5.50×10^{-3}	- -	- -	- -	- -	- -	- -	9.63×10^{-3} 9.02×10^{-3}	4.69×10^{-2} 4.07×10^{-2}	1.24×10^{-2} ** 4.76×10^{-3}	2.14×10^{-3} 1.01×10^{-2}	2.02×10^{-2} ** 9.76×10^{-3}
ESG_high	3.30×10^{-2} ** 4.10×10^{-3}	8.13×10^{-3} ** 1.77×10^{-3}	5.24×10^{-3} ** 1.75×10^{-3}	8.61×10^{-3} ** 3.25×10^{-3}	9.33×10^{-3} ** 3.28×10^{-3}	5.00×10^{-3} ** 2.00×10^{-3}	6.09×10^{-3} ** 1.86×10^{-3}	1.80×10^{-2} ** 5.24×10^{-3}	9.13×10^{-3} 9.47×10^{-3}	6.25×10^{-2} ** 1.99×10^{-2}	- -	6.10×10^{-2} ** 9.58×10^{-3}
COVID*ESG_high	3.84×10^{-2} ** 1.19×10^{-2}	9.93×10^{-3} * 5.10×10^{-3}	6.74×10^{-3} 5.03×10^{-3}	6.20×10^{-3} 9.32×10^{-3}	1.28×10^{-2} 9.42×10^{-3}	1.24×10^{-3} 5.73×10^{-3}	3.78×10^{-3} 5.33×10^{-3}	1.61×10^{-2} 1.50×10^{-2}	3.12×10^{-2} 2.72×10^{-2}	1.49×10^{-1} ** 5.72×10^{-2}	- -	5.71×10^{-2} ** 2.77×10^{-2}
Constant	5.15×10^{-3} ** 7.00×10^{-4}	6.30×10^{-3} ** 1.52×10^{-3}	5.03×10^{-3} ** 1.87×10^{-3}	4.47×10^{-3} ** 1.73×10^{-3}	3.54×10^{-3} ** 1.40×10^{-3}	5.53×10^{-3} ** 2.13×10^{-3}	6.41×10^{-3} ** 1.98×10^{-3}	3.93×10^{-3} ** 1.20×10^{-3}	1.21×10^{-3} 2.02×10^{-3}	2.65×10^{-3} ** 1.12×10^{-3}	3.11×10^{-3} ** 1.51×10^{-3}	6.97×10^{-3} ** 1.16×10^{-3}
R-squared	0.0206	0.0092	0.0065	0.0050	0.0100	0.0191	0.0140	0.0013	0.0049	0.0170	0.0105	0.0330
Panel D. Community score												
COVID	1.05×10^{-3} 1.97×10^{-3}	1.64×10^{-3} 4.34×10^{-3}	1.72×10^{-3} 5.36×10^{-3}	-1.35×10^{-3} 4.97×10^{-3}	3.64×10^{-4} 4.13×10^{-3}	-4.28×10^{-3} 6.11×10^{-3}	-2.62×10^{-3} 5.67×10^{-3}	-4.95×10^{-4} 3.37×10^{-3}	4.97×10^{-3} 5.76×10^{-3}	5.32×10^{-3} 3.28×10^{-3}	-2.25×10^{-3} 4.32×10^{-3}	-3.78×10^{-4} 3.32×10^{-3}
ESG_low	1.16×10^{-1} ** 1.43×10^{-2}	- -	- -	- -	2.66×10^{-2} ** 8.10×10^{-3}	- -	- -	1.98×10^{-2} ** 5.50×10^{-3}	2.83×10^{-2} 2.83×10^{-2}	6.13×10^{-2} ** 2.04×10^{-2}	1.42×10^{-2} ** 7.07×10^{-3}	- -
COVID*ESG_low	1.36×10^{-1} ** 4.14×10^{-2}	- -	- -	- -	2.85×10^{-2} 2.33×10^{-2}	- -	- -	1.76×10^{-2} 1.58×10^{-2}	9.37×10^{-2} 8.10×10^{-2}	1.50×10^{-1} ** 5.85×10^{-2}	4.29×10^{-3} 2.03×10^{-2}	- -
ESG_high	1.10×10^{-2} ** 1.36×10^{-3}	3.25×10^{-2} ** 7.10×10^{-3}	5.23×10^{-3} ** 1.75×10^{-3}	4.29×10^{-3} ** 1.62×10^{-3}	1.33×10^{-2} ** 4.05×10^{-3}	5.01×10^{-3} ** 2.00×10^{-3}	6.08×10^{-3} ** 1.85×10^{-3}	1.19×10^{-2} ** 3.30×10^{-3}	4.72×10^{-3} 4.71×10^{-3}	1.23×10^{-2} ** 4.08×10^{-3}	2.84×10^{-2} ** 1.41×10^{-2}	1.13×10^{-2} ** 1.79×10^{-3}
COVID*ESG_high	1.29×10^{-2} ** 3.93×10^{-3}	3.97×10^{-2} 2.04×10^{-2}	6.74×10^{-3} 5.03×10^{-3}	3.10×10^{-3} 4.66×10^{-3}	1.42×10^{-2} 1.16×10^{-2}	1.24×10^{-3} 5.73×10^{-3}	3.78×10^{-3} 5.33×10^{-3}	1.06×10^{-2} 9.49×10^{-3}	1.56×10^{-2} 1.35×10^{-2}	3.00×10^{-2} ** 1.17×10^{-2}	8.58×10^{-3} 4.05×10^{-2}	1.07×10^{-2} ** 5.17×10^{-3}
Constant	5.09×10^{-3} ** 6.87×10^{-4}	6.30×10^{-3} ** 1.52×10^{-3}	5.02×10^{-3} ** 1.87×10^{-3}	4.45×10^{-3} ** 1.73×10^{-3}	4.38×10^{-3} ** 1.44×10^{-3}	5.53×10^{-3} ** 2.13×10^{-3}	6.39×10^{-3} ** 1.98×10^{-3}	4.02×10^{-3} ** 1.18×10^{-3}	1.28×10^{-3} 2.01×10^{-3}	2.58×10^{-3} ** 1.15×10^{-3}	3.11×10^{-3} ** 1.51×10^{-3}	6.87×10^{-3} ** 1.16×10^{-3}
R-squared	0.0236	0.0119	0.0087	0.0063	0.0065	0.0041	0.0180	0.0173	0.0006	0.0221	0.0228	0.0258

Table A17. *Cont.*

	Europe								Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
	Panel E. Product responsibility score											
COVID	1.07×10^{-3}	1.64×10^{-3}	1.72×10^{-3}	-1.35×10^{-3}	1.57×10^{-3}	-4.28×10^{-3}	-2.64×10^{-3}	-4.96×10^{-4}	4.96×10^{-3}	5.25×10^{-3} **	-2.25×10^{-3}	-4.03×10^{-4} **
	1.97×10^{-3}	4.34×10^{-3}	5.36×10^{-3}	4.97×10^{-3}	4.02×10^{-3}	6.11×10^{-3}	5.68×10^{-3}	3.37×10^{-3}	5.76×10^{-3}	3.28×10^{-3}	4.32×10^{-3}	3.33×10^{-3}
ESG_low	3.86×10^{-2} **	-	-	-	1.87×10^{-2} **	-	-	2.97×10^{-2} **	2.83×10^{-2}	8.39×10^{-3} **	-	8.90×10^{-2} **
	4.78×10^{-3}	-	-	-	6.57×10^{-3}	-	-	8.26×10^{-3}	2.83×10^{-2}	2.79×10^{-3}	-	1.42×10^{-2}
COVID*ESG_low	4.55×10^{-2} **	-	-	-	2.56×10^{-2}	-	-	2.64×10^{-2}	9.37×10^{-2}	2.04×10^{-2} **	-	8.44×10^{-2} **
	1.38×10^{-2}	-	-	-	1.88×10^{-2}	-	-	2.37×10^{-2}	8.10×10^{-2}	8.00×10^{-3}	-	4.09×10^{-2}
ESG_high	2.00×10^{-2} **	1.08×10^{-2} **	1.05×10^{-2} **	-	9.34×10^{-3} **	5.00×10^{-3} **	6.09×10^{-3} **	9.91×10^{-3} **	5.67×10^{-3}	4.19×10^{-2} **	2.83×10^{-2} **	2.54×10^{-2} **
	2.48×10^{-3}	2.37×10^{-3}	3.51×10^{-3}	-	3.28×10^{-3}	2.00×10^{-3}	1.86×10^{-3}	2.75×10^{-3}	5.65×10^{-3}	1.40×10^{-2}	1.41×10^{-2}	4.05×10^{-3}
COVID*ESG_high	2.36×10^{-2} **	1.32×10^{-2} *	1.35×10^{-2}	-	1.28×10^{-2}	1.24×10^{-3}	3.78×10^{-3}	8.82×10^{-3}	1.87×10^{-2}	1.02×10^{-1} **	8.58×10^{-3}	2.41×10^{-2} **
	7.18×10^{-3}	6.80×10^{-3}	1.01×10^{-2}	-	9.42×10^{-3}	5.73×10^{-3}	5.33×10^{-3}	7.91×10^{-3}	1.62×10^{-2}	4.00×10^{-2}	4.05×10^{-2}	1.17×10^{-2}
Constant	5.08×10^{-3} **	6.30×10^{-3} **	5.02×10^{-3} **	4.45×10^{-3} **	3.55×10^{-3} **	5.53×10^{-3} **	6.41×10^{-3} **	4.02×10^{-3} **	1.29×10^{-3}	2.59×10^{-3} **	3.10×10^{-3} **	6.90×10^{-3} **
	6.88×10^{-4}	1.52×10^{-3}	1.87×10^{-3}	1.73×10^{-3}	1.40×10^{-3}	2.13×10^{-3}	1.98×10^{-3}	1.18×10^{-3}	2.01×10^{-3}	1.15×10^{-3}	1.51×10^{-3}	1.16×10^{-3}
R-squared	0.0249	0.0093	0.0067	0.0048	0.0098	0.0191	0.0140	0.0013	0.0048	0.0165	0.0105	0.0240

Notes: ** and * refer to 5% and 10% levels of statistical significance, respectively.

Table A18. Panel data regression results for risk-adjusted returns and governance pillar (G) scores.

		Europe							Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
Panel A. Governance pillar score												
COVID	1.10×10^{-3} 1.98×10^{-3}	1.65×10^{-3} 4.34×10^{-3}	1.72×10^{-3} 5.36×10^{-3}	-1.35×10^{-3} 4.97×10^{-3}	1.57×10^{-3} 4.02×10^{-3}	-4.28×10^{-3} 6.11×10^{-3}	-2.60×10^{-3} 5.67×10^{-3}	-4.80×10^{-4} 3.43×10^{-3}	4.96×10^{-3} 5.76×10^{-3}	5.36×10^{-3} 3.31×10^{-3}	-2.25×10^{-3} 4.32×10^{-3}	-4.22×10^{-4} 3.33×10^{-3}
ESG_low	1.69×10^{-1} ** 2.10×10^{-2}	- -	- -	- -	- -	- -	- -	- -	- -	4.19×10^{-2} ** 1.37×10^{-2}	2.83×10^{-2} ** 1.41×10^{-2}	3.45×10^{-1} ** 5.50×10^{-2}
COVID*ESG_low	2.00×10^{-1} ** 6.09×10^{-2}	- -	- -	- -	- -	- -	- -	- -	- -	1.02×10^{-1} ** 3.94×10^{-2}	8.58×10^{-3} 4.05×10^{-2}	3.26×10^{-1} ** 1.59×10^{-1}
ESG_high	3.90×10^{-2} ** 4.85×10^{-3}	3.24×10^{-2} ** 7.10×10^{-3}	5.23×10^{-3} ** 1.75×10^{-3}	- -	- -	5.01×10^{-3} ** 2.00×10^{-3}	1.21×10^{-2} ** 3.71×10^{-3}	1.80×10^{-2} ** 5.24×10^{-3}	1.42×10^{-2} 1.41×10^{-2}	4.19×10^{-2} ** 1.37×10^{-2}	2.83×10^{-2} ** 1.41×10^{-2}	5.75×10^{-2} ** 9.17×10^{-3}
COVID*ESG_high	4.62×10^{-2} ** 1.41×10^{-2}	3.97×10^{-2} * 2.04×10^{-2}	6.74×10^{-3} 5.03×10^{-3}	- -	- -	1.24×10^{-3} 5.73×10^{-3}	7.55×10^{-3} 1.06×10^{-2}	1.61×10^{-2} 1.50×10^{-2}	4.69×10^{-2} 4.05×10^{-2}	1.02×10^{-1} ** 3.94×10^{-2}	8.58×10^{-3} 4.05×10^{-2}	5.44×10^{-2} ** 2.65×10^{-2}
Constant	5.07×10^{-3} ** 6.91×10^{-4}	6.29×10^{-3} ** 1.52×10^{-3}	5.02×10^{-3} ** 1.87×10^{-3}	4.45×10^{-3} ** 1.73×10^{-3}	3.55×10^{-3} ** 1.40×10^{-3}	5.53×10^{-3} ** 2.13×10^{-3}	6.38×10^{-3} ** 1.98×10^{-3}	3.92×10^{-3} ** 1.20×10^{-3}	1.29×10^{-3} 2.01×10^{-3}	2.66×10^{-3} ** 1.16×10^{-3}	3.10×10^{-3} ** 1.51×10^{-3}	6.88×10^{-3} ** 1.16×10^{-3}
R-squared	0.0258	0.0093	0.0067	0.0048	0.0098	0.0191	0.0137	0.0013	0.0048	0.0169	0.0105	0.0240
Panel B. Management score												
COVID	1.09×10^{-3} 1.97×10^{-3}	1.65×10^{-3} 4.34×10^{-3}	1.72×10^{-3} 5.36×10^{-3}	-1.35×10^{-3} 4.97×10^{-3}	1.57×10^{-3} 4.02×10^{-3}	-4.28×10^{-3} 6.11×10^{-3}	-2.62×10^{-3} 5.67×10^{-3}	-4.81×10^{-4} 3.43×10^{-3}	4.96×10^{-3} 5.76×10^{-3}	5.32×10^{-3} 3.28×10^{-3}	-2.25×10^{-3} 4.32×10^{-3}	-4.23×10^{-4} 3.33×10^{-3}
ESG_low	1.12×10^{-1} ** 1.40×10^{-2}	- -	- -	- -	- -	- -	- -	- -	2.84×10^{-2} 2.83×10^{-2}	2.45×10^{-2} ** 8.16×10^{-3}	2.83×10^{-2} ** 1.41×10^{-2}	3.45×10^{-1} ** 5.50×10^{-2}
COVID*ESG_low	1.33×10^{-1} ** 4.05×10^{-2}	- -	- -	- -	- -	- -	- -	- -	9.37×10^{-2} 8.10×10^{-2}	6.00×10^{-2} ** 2.34×10^{-2}	8.58×10^{-3} 4.05×10^{-2}	3.26×10^{-1} ** 1.59×10^{-1}
ESG_high	2.25×10^{-2} ** 2.80×10^{-3}	3.24×10^{-2} ** 7.10×10^{-3}	5.23×10^{-3} ** 1.75×10^{-3}	8.58×10^{-3} ** 3.25×10^{-3}	- -	5.01×10^{-3} ** 2.00×10^{-3}	6.08×10^{-3} ** 1.85×10^{-3}	1.35×10^{-2} ** 3.93×10^{-3}	9.47×10^{-3} 9.42×10^{-3}	1.53×10^{-2} ** 5.10×10^{-3}	2.83×10^{-2} ** 1.41×10^{-2}	3.14×10^{-2} ** 5.00×10^{-3}
COVID*ESG_high	2.66×10^{-2} ** 8.10×10^{-3}	3.97×10^{-2} * 2.04×10^{-2}	6.74×10^{-3} 5.03×10^{-3}	6.20×10^{-3} 9.32×10^{-3}	- -	1.24×10^{-3} 5.73×10^{-3}	3.78×10^{-3} 5.33×10^{-3}	1.20×10^{-2} 1.13×10^{-2}	3.12×10^{-2} 2.70×10^{-2}	3.75×10^{-2} ** 1.46×10^{-2}	8.58×10^{-3} 4.05×10^{-2}	2.97×10^{-2} ** 1.44×10^{-2}
Constant	5.05×10^{-3} ** 6.89×10^{-4}	6.29×10^{-3} ** 1.52×10^{-3}	5.02×10^{-3} ** 1.87×10^{-3}	4.45×10^{-3} ** 1.73×10^{-3}	3.55×10^{-3} ** 1.40×10^{-3}	5.53×10^{-3} ** 2.13×10^{-3}	6.39×10^{-3} ** 1.98×10^{-3}	3.92×10^{-3} ** 1.20×10^{-3}	1.29×10^{-3} 2.01×10^{-3}	2.58×10^{-3} ** 1.15×10^{-3}	3.10×10^{-3} ** 1.51×10^{-3}	6.88×10^{-3} ** 1.16×10^{-3}
R-squared	0.0256	0.0093	0.0067	0.0048	0.0098	0.0191	0.0138	0.0013	0.0048	0.0170	0.0105	0.0240

Table A18. *Cont.*

		Europe							Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
Panel C. Shareholders score												
COVID	1.09×10^{-3} 1.97×10^{-3}	1.64×10^{-3} 4.34×10^{-3}	1.72×10^{-3} 5.36×10^{-3}	-1.36×10^{-3} 4.97×10^{-3}	1.57×10^{-3} 4.02×10^{-3}	-4.28×10^{-3} 6.11×10^{-3}	-2.63×10^{-3} 5.68×10^{-3}	-4.86×10^{-4} 3.43×10^{-3}	4.96×10^{-3} 5.76×10^{-3}	5.52×10^{-3} * 3.30×10^{-3}	-2.25×10^{-3} 4.32×10^{-3}	-3.19×10^{-4} 3.24×10^{-3}
ESG_low	5.32×10^{-2} ** 6.62×10^{-3}	3.25×10^{-2} ** 7.10×10^{-3}	- -	8.60×10^{-3} ** 3.25×10^{-3}	- -	- -	1.22×10^{-2} ** 3.71×10^{-3}	- -	1.42×10^{-2} 1.41×10^{-2}	2.78×10^{-2} ** 9.45×10^{-3}	2.84×10^{-2} ** 1.41×10^{-2}	7.79×10^{-2} ** 1.22×10^{-2}
COVID*ESG_low	6.30×10^{-2} ** 1.92×10^{-2}	3.97×10^{-2} * 2.04×10^{-2}	- -	6.20×10^{-3} 9.32×10^{-3}	- -	- -	7.55×10^{-3} 1.07×10^{-2}	- -	4.69×10^{-2} 4.05×10^{-2}	7.02×10^{-2} ** 2.71×10^{-2}	8.58×10^{-3} 4.05×10^{-2}	7.47×10^{-2} ** 3.53×10^{-2}
ESG_high	2.20×10^{-2} ** 2.74×10^{-3}	3.25×10^{-2} ** 7.10×10^{-3}	5.23×10^{-3} 1.75×10^{-3}	- -	9.34×10^{-3} ** 3.28×10^{-3}	5.01×10^{-3} ** 2.00×10^{-3}	- -	1.80×10^{-2} ** 5.24×10^{-3}	4.73×10^{-3} 4.71×10^{-3}	2.78×10^{-2} ** 9.45×10^{-3}	2.84×10^{-2} ** 1.41×10^{-2}	2.70×10^{-2} ** 4.24×10^{-3}
COVID*ESG_high	2.60×10^{-2} ** 7.92×10^{-3}	3.97×10^{-2} * 2.04×10^{-2}	6.74×10^{-3} 5.03×10^{-3}	- -	1.28×10^{-2} 9.42×10^{-3}	1.24×10^{-3} 5.73×10^{-3}	- -	1.61×10^{-2} 1.50×10^{-2}	1.56×10^{-2} 1.35×10^{-2}	7.02×10^{-2} ** 2.71×10^{-2}	8.58×10^{-3} 4.05×10^{-2}	2.58×10^{-2} ** 1.22×10^{-2}
Constant	5.05×10^{-3} ** 6.89×10^{-4}	6.30×10^{-3} ** 1.52×10^{-3}	5.02×10^{-3} ** 1.87×10^{-3}	4.47×10^{-3} ** 1.73×10^{-3}	3.54×10^{-3} ** 1.40×10^{-3}	5.53×10^{-3} ** 2.13×10^{-3}	6.41×10^{-3} ** 1.98×10^{-3}	3.93×10^{-3} ** 1.20×10^{-3}	1.29×10^{-3} 2.01×10^{-3}	2.50×10^{-3} ** 1.15×10^{-3}	3.11×10^{-3} ** 1.51×10^{-3}	6.78×10^{-3} ** 1.13×10^{-3}
R-squared	0.0256	0.0093	0.0067	0.0048	0.0100	0.0191	0.0140	0.0013	0.0048	0.0181	0.0105	0.0160
Panel D. CSR strategy score												
COVID	1.07×10^{-3} 1.97×10^{-3}	1.65×10^{-3} 4.34×10^{-3}	1.72×10^{-3} 5.36×10^{-3}	-1.35×10^{-3} 4.97×10^{-3}	1.57×10^{-3} 4.02×10^{-3}	-4.28×10^{-3} 6.11×10^{-3}	-2.62×10^{-3} 5.67×10^{-3}	-4.81×10^{-4} 3.43×10^{-3}	4.96×10^{-3} 5.76×10^{-3}	5.41×10^{-3} 3.29×10^{-3}	-2.25×10^{-3} 4.32×10^{-3}	-4.27×10^{-4} 3.31×10^{-3}
ESG_low	2.91×10^{-2} ** 3.60×10^{-3}	- -	- -	- -	1.87×10^{-2} ** 6.57×10^{-3}	- -	- -	2.70×10^{-2} ** 7.86×10^{-3}	7.10×10^{-3} 7.07×10^{-3}	9.02×10^{-3} ** 3.06×10^{-3}	- -	4.70×10^{-2} ** 7.35×10^{-3}
COVID*ESG_low	3.44×10^{-2} ** 1.04×10^{-2}	- -	- -	- -	2.56×10^{-2} 1.88×10^{-2}	- -	- -	2.41×10^{-2} 2.26×10^{-2}	2.34×10^{-2} 2.02×10^{-2}	2.25×10^{-2} ** 8.78×10^{-3}	- -	4.44×10^{-2} ** 2.12×10^{-2}
ESG_high	1.54×10^{-2} ** 1.91×10^{-3}	3.24×10^{-2} ** 7.10×10^{-3}	5.23×10^{-3} ** 1.75×10^{-3}	- -	- -	5.01×10^{-3} ** 2.00×10^{-3}	1.22×10^{-2} ** 3.71×10^{-3}	1.08×10^{-2} ** 3.14×10^{-3}	5.68×10^{-3} 5.65×10^{-3}	1.68×10^{-2} ** 5.69×10^{-3}	7.07×10^{-3} ** 3.53×10^{-3}	1.76×10^{-2} ** 2.76×10^{-3}
COVID*ESG_high	1.82×10^{-2} ** 5.52×10^{-3}	3.97×10^{-2} * 2.04×10^{-2}	6.74×10^{-3} 5.03×10^{-3}	- -	- -	1.24×10^{-3} 5.73×10^{-3}	7.55×10^{-3} 1.07×10^{-2}	9.63×10^{-3} 9.02×10^{-3}	1.87×10^{-2} 1.62×10^{-2}	4.19×10^{-2} ** 1.63×10^{-2}	2.14×10^{-3} 1.01×10^{-2}	1.67×10^{-2} ** 7.95×10^{-3}
Constant	5.10×10^{-3} ** 6.89×10^{-4}	6.29×10^{-3} ** 1.52×10^{-3}	5.02×10^{-3} ** 1.87×10^{-3}	4.45×10^{-3} ** 1.73×10^{-3}	3.55×10^{-3} ** 1.40×10^{-3}	5.53×10^{-3} ** 2.13×10^{-3}	6.39×10^{-3} ** 1.98×10^{-3}	3.92×10^{-3} ** 1.20×10^{-3}	1.29×10^{-3} 2.01×10^{-3}	2.51×10^{-3} ** 1.15×10^{-3}	3.10×10^{-3} ** 1.51×10^{-3}	6.96×10^{-3} ** 1.15×10^{-3}
R-squared	0.0249	0.0093	0.0067	0.0048	0.0098	0.0191	0.0138	0.0013	0.0048	0.0175	0.0105	0.0240

Notes: ** and * refer to 5% and 10% levels of statistical significance, respectively.

Table A19. Panel data regression results for risk-adjusted returns and controversies score.

		Europe							Non-Europe			
	All Countries	**France**	**Germany**	**Netherlands**	**Spain**	**Sweden**	**Switzerland**	**United Kingdom**	**Brazil**	**Canada**	**Singapore**	**United States**
COVID	1.14×10^{-3}	1.75×10^{-3}	2.55×10^{-3}	-1.37×10^{-3}	1.58×10^{-3}	-4.41×10^{-3}	-2.66×10^{-3}	-5.69×10^{-4}	5.07×10^{-3}	5.13×10^{-3}	-2.38×10^{-3}	-3.09×10^{-4}
	1.98×10^{-3}	4.34×10^{-3}	5.37×10^{-3}	4.97×10^{-3}	4.02×10^{-3}	6.09×10^{-3}	5.68×10^{-3}	3.42×10^{-3}	5.80×10^{-3}	3.13×10^{-3}	4.32×10^{-3}	3.30×10^{-3}
ESG_low	1.25×10^{-1} **	-	-	-	-	-	1.19×10^{-2} **	-	2.73×10^{-2}	-	-	1.13×10^{-1} **
	1.58×10^{-2}	-	-	-	-	-	3.71×10^{-3}	-	2.84×10^{-2}	-	-	1.82×10^{-2}
COVID*ESG_low	1.49×10^{-1} **	-	-	-	-	-	7.19×10^{-3}	-	9.41×10^{-2}	-	-	1.08×10^{-1} **
	4.56×10^{-2}	-	-	-	-	-	1.07×10^{-2}	-	8.15×10^{-2}	-	-	5.24×10^{-2}
ESG_high	8.31×10^{-3} **	1.08×10^{-2} **	-	4.31×10^{-3} **	3.73×10^{-3} **	-	-	9.17×10^{-3} **	2.10×10^{-3}	3.62×10^{-3} **	3.53×10^{-3} **	1.38×10^{-2} **
	1.05×10^{-3}	2.37×10^{-3}	-	1.62×10^{-3}	1.31×10^{-3}	-	-	2.42×10^{-3}	2.19×10^{-3}	1.18×10^{-3}	1.77×10^{-3}	2.22×10^{-3}
COVID*ESG_high	9.94×10^{-3} **	1.34×10^{-2} **	-	3.10×10^{-3}	5.12×10^{-3}	-	-	8.08×10^{-3}	7.24×10^{-3}	8.78×10^{-3} **	9.21×10^{-4}	1.32×10^{-2} **
	3.04×10^{-3}	6.81×10^{-3}	-	4.66×10^{-3}	3.77×10^{-3}	-	-	6.96×10^{-3}	6.27×10^{-3}	3.37×10^{-3}	5.07×10^{-3}	6.41×10^{-3}
Constant	4.97×10^{-3} **	6.27×10^{-3} **	4.82×10^{-3} **	4.47×10^{-3} **	3.54×10^{-3} **	5.91×10^{-3} **	6.26×10^{-3} **	4.30×10^{-3} **	1.20×10^{-3}	2.53×10^{-3} **	3.11×10^{-3} **	6.73×10^{-3} **
	6.90×10^{-4}	1.52×10^{-3}	1.87×10^{-3}	1.73×10^{-3}	1.40×10^{-3}	2.12×10^{-3}	1.98×10^{-3}	1.19×10^{-3}	2.02×10^{-3}	1.09×10^{-3}	1.51×10^{-3}	1.15×10^{-3}
R-squared	0.0260	0.0126	0.0174	0.0060	0.0120	0.0203	0.0017	0.0035	0.0059	0.0038	0.0023	0.0250

Notes: ** refer to 5% of statistical significance.

Table A20. Cross-sectional results for returns against ESG score indices and WGI_high.

	CS	S	EPS	RU	E	I	SPS	W	HR	Co	PR	GPS	M	Sh	CSR_S	CoS
Panel A. Full sample																
COVID	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}
Index_low	1.37×10^{-2} ** 4.28×10^{-3}	1.59×10^{-2} ** 4.97×10^{-3}	3.59×10^{-3} ** 1.12×10^{-3}	3.59×10^{-3} ** 1.12×10^{-3}	4.29×10^{-3} ** 1.34×10^{-3}	1.28×10^{-3} ** 4.00×10^{-4}	1.24×10^{-2} ** 3.86×10^{-3}	1.01×10^{-2} ** 3.16×10^{-3}	1.62×10^{-3} ** 5.04×10^{-4}	1.15×10^{-2} ** 3.59×10^{-3}	4.13×10^{-3} ** 1.29×10^{-3}	1.86×10^{-2} ** 5.80×10^{-3}	1.24×10^{-2} ** 3.86×10^{-3}	5.86×10^{-3} ** 1.83×10^{-3}	3.18×10^{-3} ** 9.94×10^{-4}	1.44×10^{-2} ** 4.48×10^{-3}
Index_high	2.19×10^{-2} ** 6.85×10^{-3}	7.43×10^{-3} ** 2.32×10^{-3}	3.38×10^{-3} ** 1.05×10^{-3}	1.74×10^{-3} ** 5.43×10^{-4}	1.96×10^{-3} ** 6.10×10^{-4}	7.96×10^{-3} ** 2.48×10^{-3}	3.01×10^{-3} ** 9.40×10^{-4}	1.49×10^{-3} ** 4.64×10^{-4}	3.48×10^{-3} ** 1.09×10^{-3}	1.21×10^{-3} ** 3.77×10^{-4}	2.14×10^{-3} ** 6.69×10^{-4}	4.29×10^{-3} ** 1.34×10^{-3}	2.48×10^{-3} ** 7.73×10^{-4}	2.42×10^{-3} ** 7.56×10^{-4}	1.69×10^{-3} ** 5.27×10^{-4}	9.57×10^{-4} ** 2.99×10^{-4}
WGI_high	1.61×10^{-3} ** 5.04×10^{-4}	1.62×10^{-3} ** 5.04×10^{-4}	1.59×10^{-3} ** 4.97×10^{-4}	1.62×10^{-3} ** 5.04×10^{-4}	1.62×10^{-3} ** 5.04×10^{-4}	1.64×10^{-3} ** 5.11×10^{-4}	1.66×10^{-3} ** 5.17×10^{-4}	1.63×10^{-3} ** 5.10×10^{-4}	1.62×10^{-3} ** 5.06×10^{-4}	1.62×10^{-3} ** 5.06×10^{-4}	1.61×10^{-3} ** 5.02×10^{-4}	1.62×10^{-3} ** 5.04×10^{-4}	1.62×10^{-3} ** 5.04×10^{-4}	1.69×10^{-3} ** 5.27×10^{-4}	1.64×10^{-3} ** 5.11×10^{-4}	1.63×10^{-3} ** 5.08×10^{-4}
Index_low* WGI_high	3.87×10^{-2} ** 1.21×10^{-2}	4.50×10^{-2} ** 1.40×10^{-2}	1.00×10^{-2} ** 3.13×10^{-3}	1.02×10^{-2} ** 3.17×10^{-3}	1.21×10^{-2} ** 3.78×10^{-3}	3.67×10^{-3} ** 1.15×10^{-3}	3.59×10^{-2} ** 1.12×10^{-2}	2.90×10^{-2} ** 9.04×10^{-3}	4.58×10^{-3} ** 1.43×10^{-3}	3.26×10^{-2} ** 1.02×10^{-2}	1.16×10^{-2} ** 3.62×10^{-3}	5.25×10^{-2} ** 1.64×10^{-2}	3.50×10^{-2} ** 1.09×10^{-2}	1.73×10^{-2} ** 5.41×10^{-3}	9.13×10^{-3} ** 2.85×10^{-3}	4.09×10^{-2} ** 1.28×10^{-2}
Index_high* WGI_high	6.20×10^{-2} ** 1.93×10^{-2}	2.10×10^{-2} ** 6.55×10^{-3}	9.41×10^{-3} ** 2.94×10^{-3}	4.92×10^{-3} ** 1.54×10^{-3}	5.52×10^{-3} ** 1.72×10^{-3}	2.28×10^{-2} ** 7.12×10^{-3}	8.73×10^{-3} ** 2.72×10^{-3}	4.25×10^{-3} ** 1.33×10^{-3}	9.88×10^{-3} ** 3.09×10^{-3}	3.43×10^{-3} ** 1.07×10^{-3}	6.03×10^{-3} ** 1.88×10^{-3}	1.21×10^{-2} ** 3.78×10^{-3}	7.00×10^{-3} ** 2.18×10^{-3}	7.16×10^{-3} ** 2.23×10^{-3}	4.84×10^{-3} ** 1.51×10^{-3}	2.72×10^{-3} ** 8.50×10^{-4}
ΔESG	1.81×10^{-5} ** 6.80×10^{-6}	1.63×10^{-5} ** 7.36×10^{-6}	3.82×10^{-5} ** 1.30×10^{-5}	5.08×10^{-5} ** 1.91×10^{-5}	2.81×10^{-5} ** 1.36×10^{-5}	-5.37×10^{-5} * 3.00×10^{-5}	2.86×10^{-5} ** 1.06×10^{-5}	2.67×10^{-5} 1.93×10^{-5}	5.17×10^{-5} 5.41×10^{-5}	2.99×10^{-5} 2.53×10^{-5}	1.83×10^{-5} 1.63×10^{-5}	9.44×10^{-6} 1.30×10^{-5}	4.66×10^{-6} 1.72×10^{-5}	-1.12×10^{-5} 1.68×10^{-5}	5.85×10^{-5} ** 2.67×10^{-5}	1.30×10^{-5} 2.39×10^{-5}
Constant	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.89×10^{-4} ** 2.09×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}
R-squared	0.0305	0.0202	0.0242	0.0218	0.0226	0.0252	0.0305	0.0272	0.0216	0.0280	0.0226	0.0198	0.0298	0.0245	0.0215	0.1209
Panel B. High ESG scores																
COVID	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}	6.36×10^{-4} 5.12×10^{-4}
Index_low	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Index_high	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}
WGI_high	1.43×10^{-3} ** 4.46×10^{-4}	1.07×10^{-3} ** 3.34×10^{-4}	1.35×10^{-3} ** 4.20×10^{-4}	2.15×10^{-3} ** 6.71×10^{-4}	2.33×10^{-3} ** 7.26×10^{-4}	2.67×10^{-3} ** 8.32×10^{-4}	2.11×10^{-3} ** 6.60×10^{-4}	1.79×10^{-3} ** 5.57×10^{-4}	1.66×10^{-3} ** 5.19×10^{-4}	2.36×10^{-3} ** 7.37×10^{-4}	2.12×10^{-3} ** 6.62×10^{-4}	1.35×10^{-3} ** 4.22×10^{-4}	1.35×10^{-3} ** 4.22×10^{-4}	2.39×10^{-3} ** 7.46×10^{-4}	1.89×10^{-3} ** 5.89×10^{-4}	1.37×10^{-3} ** 4.28×10^{-4}
Index_low* WGI_high	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Index_high* WGI_high	1.43×10^{-3} ** 4.46×10^{-4}	1.07×10^{-3} ** 3.34×10^{-4}	1.35×10^{-3} ** 4.20×10^{-4}	2.15×10^{-3} ** 6.71×10^{-4}	2.33×10^{-3} ** 7.26×10^{-4}	2.67×10^{-3} ** 8.32×10^{-4}	2.11×10^{-3} ** 6.60×10^{-4}	1.79×10^{-3} ** 5.57×10^{-4}	1.66×10^{-3} ** 5.19×10^{-4}	2.36×10^{-3} ** 7.37×10^{-4}	2.12×10^{-3} ** 6.62×10^{-4}	1.35×10^{-3} ** 4.22×10^{-4}	1.35×10^{-3} ** 4.22×10^{-4}	2.39×10^{-3} ** 7.46×10^{-4}	1.89×10^{-3} ** 5.89×10^{-4}	1.37×10^{-3} 4.28×10^{-4}
ΔESG	-1.70×10^{-4} 1.14×10^{-4}	8.93×10^{-6} 5.69×10^{-5}	6.16×10^{-5} 4.22×10^{-5}	3.83×10^{-5} * 2.35×10^{-5}	5.23×10^{-5} 3.13×10^{-5}	1.38×10^{-5} 7.71×10^{-5}	5.43×10^{-5} 3.91×10^{-5}	6.48×10^{-5} ** 2.58×10^{-5}	2.58×10^{-5} 4.01×10^{-5}	3.15×10^{-5} 2.20×10^{-5}	3.28×10^{-5} 3.48×10^{-5}	-2.05×10^{-5} 3.86×10^{-5}	-1.78×10^{-5} 3.95×10^{-5}	5.38×10^{-6} 2.84×10^{-5}	1.64×10^{-5} 3.13×10^{-5}	1.66×10^{-5} 2.99×10^{-5}
Constant	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.62×10^{-4} ** 1.90×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}	5.71×10^{-4} ** 1.78×10^{-4}
R-squared	0.01585	0.0138	0.0157	0.020875	0.022075	0.024325	0.0207	0.01855	0.017675	0.022225	0.0207	0.015525	0.01555	0.022375	0.0191	0.0629

Table A20. *Cont.*

	CS	S	EPS	RU	E	I	SPS	W	HR	Co	PR	GPS	M	Sh	CSR_S	CoS
								Panel C. Low ESG scores								
COVID	6.36×10^{-4}	6.36×10^{-4}	6.36×10^{-4}	6.36×10^{-4}	6.36×10^{-4}	6.36×10^{-4}	6.36×10^{-4}	6.36×10^{-4}	6.36×10^{-4}	6.36×10^{-4}	6.36×10^{-4}	6.36×10^{-4}	6.36×10^{-4}	6.36×10^{-4}	6.36×10^{-4}	6.36×10^{-4}
	5.12×10^{-4}	5.12×10^{-4}	5.12×10^{-4}	5.12×10^{-4}	5.12×10^{-4}	5.12×10^{-4}	5.12×10^{-4}	5.12×10^{-4}	5.12×10^{-4}	5.12×10^{-4}	5.12×10^{-4}	5.12×10^{-4}	5.12×10^{-4}	5.12×10^{-4}	5.12×10^{-4}	5.12×10^{-4}
Index_low	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **
	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}
Index_high	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WGI_high	9.14×10^{-4} **	8.00×10^{-4} **	8.86×10^{-4} **	1.04×10^{-3} **	1.14×10^{-3} **	1.28×10^{-3} **	8.57×10^{-4} **	1.26×10^{-3} **	1.20×10^{-3} **	2.36×10^{-3} **	9.07×10^{-4} **	8.57×10^{-4} **	8.57×10^{-4} **	1.55×10^{-3} **	1.33×10^{-3} **	4.57×10^{-3} **
	2.85×10^{-4}	2.50×10^{-4}	2.76×10^{-4}	3.25×10^{-4}	3.57×10^{-4}	3.98×10^{-4}	2.68×10^{-4}	3.92×10^{-4}	3.73×10^{-4}	7.37×10^{-4}	2.83×10^{-4}	2.68×10^{-4}	2.68×10^{-4}	4.84×10^{-4}	4.16×10^{-4}	1.43×10^{-3}
Index_low* WGI_high	9.14×10^{-4} **	8.00×10^{-4} **	8.86×10^{-4} **	1.04×10^{-3} **	1.14×10^{-3} **	1.28×10^{-3} **	8.57×10^{-4} **	1.26×10^{-3} **	1.20×10^{-3} **	2.36×10^{-3} **	9.07×10^{-4} **	8.57×10^{-4} **	8.57×10^{-4} **	1.55×10^{-3} **	1.33×10^{-3} **	4.57×10^{-3} **
	2.85×10^{-4}	2.50×10^{-4}	2.76×10^{-4}	3.25×10^{-4}	3.57×10^{-4}	3.98×10^{-4}	2.68×10^{-4}	3.92×10^{-4}	3.73×10^{-4}	7.37×10^{-4}	2.83×10^{-4}	2.68×10^{-4}	2.68×10^{-4}	4.84×10^{-4}	4.16×10^{-4}	1.43×10^{-3}
Index_high* WGI_high	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Δ ESG	9.85×10^{-5}	1.47×10^{-4}	8.21×10^{-5} **	9.31×10^{-5} **	1.17×10^{-4} **	1.56×10^{-5}	6.91×10^{-5}	7.39×10^{-5}	3.16×10^{-5}	3.15×10^{-5}	1.25×10^{-4} *	-2.94×10^{-5}	-6.37×10^{-5}	-7.55×10^{-6}	8.74×10^{-5}	-2.13×10^{-4} **
	1.21×10^{-4}	1.52×10^{-4}	2.92×10^{-5}	4.14×10^{-5}	4.71×10^{-5}	5.05×10^{-5}	7.76×10^{-5}	1.01×10^{-4}	3.07×10^{-5}	2.20×10^{-5}	6.56×10^{-5}	7.99×10^{-5}	5.86×10^{-5}	4.72×10^{-5}	5.71×10^{-5}	9.80×10^{-5}
Constant	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **	5.71×10^{-4} **
	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}	1.78×10^{-4}
R-squared	0.01315	0.012625	0.0127	0.013775	0.145025	0.01515	0.0126	0.0153	0.0146	0.022225	0.01305	0.012375	0.012225	0.0169	0.015725	0.1453

Notes. (1) Results concern model 3; the portfolios concern the companies with the highest and lowest average ESG-specific scores (10–12; and 1–4, respectively) as well as across the full sample (with all variables weighted based on the category of the volume of ESG score (1–4 low; 5–9 middle; and 10–12 high), across all countries. (2) ** and * refer to 5% and 10% levels of statistical significance, respectively.

Table A21. Cross-sectional results for absolute returns against ESG score indices and WGI_high.

	CS	S	EPS	RU	E	I	SPS	W	HR	Co	PR	GPS	M	Sh	CSR_S	CoS
Panel A. Full sample																
COVID	7.35×10^{-3} **	7.37×10^{-3} **	7.57×10^{-3} **	7.55×10^{-3} **	7.48×10^{-3} **	7.62×10^{-3} **	7.25×10^{-3} **	7.36×10^{-3} **	7.47×10^{-3} **	8.15×10^{-3} **	7.62×10^{-3} **	7.10×10^{-3} **	7.21×10^{-3} **	7.30×10^{-3} **	7.40×10^{-3} **	7.63×10^{-3} **
	3.10×10^{-4}	3.09×10^{-4}	3.10×10^{-4}	3.08×10^{-4}	3.07×10^{-4}	3.11×10^{-4}	3.05×10^{-4}	3.07×10^{-4}	3.10×10^{-4}	3.28×10^{-4}	3.14×10^{-4}	3.03×10^{-4}	3.06×10^{-4}	3.06×10^{-4}	3.06×10^{-4}	3.11×10^{-4}
Index_low	1.02×10^{-1} **	1.19×10^{-1} **	2.75×10^{-2} **	2.74×10^{-2} **	3.24×10^{-2} **	1.00×10^{-2} **	9.21×10^{-2} **	7.65×10^{-2} **	1.23×10^{-2} **	9.75×10^{-2} **	3.25×10^{-2} **	1.34×10^{-1} **	9.07×10^{-2} **	4.37×10^{-2} **	2.39×10^{-2} **	1.10×10^{-1} **
	2.05×10^{-3}	2.36×10^{-3}	5.24×10^{-4}	5.22×10^{-4}	6.23×10^{-4}	1.84×10^{-4}	1.79×10^{-3}	1.47×10^{-3}	2.35×10^{-4}	1.69×10^{-3}	5.99×10^{-4}	2.73×10^{-3}	1.82×10^{-3}	8.50×10^{-4}	4.61×10^{-4}	2.11×10^{-3}
Index_high	1.63×10^{-1} **	5.54×10^{-2} **	2.59×10^{-2} **	1.33×10^{-2} **	1.48×10^{-2} **	6.23×10^{-2} **	2.24×10^{-2} **	1.12×10^{-2} **	2.66×10^{-2} **	1.03×10^{-2} **	1.69×10^{-2} **	3.08×10^{-2} **	1.82×10^{-2} **	1.80×10^{-2} **	1.27×10^{-2} **	7.37×10^{-3} **
	3.27×10^{-3}	1.10×10^{-3}	4.92×10^{-4}	2.53×10^{-4}	2.84×10^{-4}	1.14×10^{-3}	4.34×10^{-4}	2.15×10^{-4}	5.07×10^{-4}	1.78×10^{-4}	3.11×10^{-4}	6.29×10^{-4}	3.64×10^{-4}	3.51×10^{-4}	2.45×10^{-4}	1.41×10^{-4}
WGI_high	1.20×10^{-2} **	1.20×10^{-2} **	1.22×10^{-2} **	1.23×10^{-2} **	1.22×10^{-2} **	1.28×10^{-2} **	1.23×10^{-2} **	1.23×10^{-2} **	1.24×10^{-2} **	1.38×10^{-2} **	1.27×10^{-2} **	1.16×10^{-2} **	1.18×10^{-2} **	1.26×10^{-2} **	1.23×10^{-2} **	1.25×10^{-2} **
	2.41×10^{-4}	2.39×10^{-4}	2.32×10^{-4}	2.34×10^{-4}	2.35×10^{-4}	2.35×10^{-4}	2.39×10^{-4}	2.36×10^{-4}	2.36×10^{-4}	2.39×10^{-4}	2.33×10^{-4}	2.37×10^{-4}	2.38×10^{-4}	2.45×10^{-4}	2.37×10^{-4}	2.39×10^{-4}
Index_low* WGI_high	2.87×10^{-1} **	3.35×10^{-1} **	7.67×10^{-2} **	7.76×10^{-2} **	9.16×10^{-2} **	2.88×10^{-2} **	2.67×10^{-1} **	2.19×10^{-1} **	3.50×10^{-2} **	2.77×10^{-1} **	9.15×10^{-2} **	3.77×10^{-1} **	2.56×10^{-1} **	1.29×10^{-1} **	6.85×10^{-2} **	3.14×10^{-1} **
	5.78×10^{-3}	6.67×10^{-3}	1.46×10^{-3}	1.47×10^{-3}	1.76×10^{-3}	5.27×10^{-4}	5.17×10^{-3}	4.19×10^{-3}	6.67×10^{-4}	4.80×10^{-3}	1.68×10^{-3}	7.71×10^{-3}	5.15×10^{-3}	2.51×10^{-3}	1.32×10^{-3}	6.00×10^{-3}
Index_high* WGI_high	4.60×10^{-1} **	1.56×10^{-1} **	7.21×10^{-2} **	3.76×10^{-2} **	4.18×10^{-2} **	1.79×10^{-1} **	6.49×10^{-2} **	3.21×10^{-2} **	7.55×10^{-2} **	2.92×10^{-2} **	4.75×10^{-2} **	8.71×10^{-2} **	5.13×10^{-2} **	5.33×10^{-2} **	3.63×10^{-2} **	2.10×10^{-2} **
	9.24×10^{-3}	3.11×10^{-3}	1.37×10^{-3}	7.14×10^{-4}	8.03×10^{-4}	3.28×10^{-3}	1.26×10^{-3}	6.15×10^{-4}	1.44×10^{-3}	5.06×10^{-4}	8.74×10^{-4}	1.78×10^{-3}	1.03×10^{-3}	1.04×10^{-3}	7.02×10^{-4}	4.00×10^{-4}
Δ ESG	1.33×10^{-4} **	1.39×10^{-4} **	2.59×10^{-4} **	3.55×10^{-4} **	2.66×10^{-4} **	-2.83×10^{-4} **	2.09×10^{-4} **	3.03×10^{-4} **	4.70×10^{-4} **	3.53×10^{-4} **	1.55×10^{-4} **	1.19×10^{-4} **	4.91×10^{-5} **	-6.97×10^{-5} **	4.44×10^{-4} **	-4.26×10^{-5} **
	3.72×10^{-6}	4.07×10^{-6}	7.12×10^{-6}	1.07×10^{-5}	7.40×10^{-6}	1.94×10^{-5}	5.65×10^{-6}	1.13×10^{-5}	3.50×10^{-5}	1.67×10^{-5}	1.07×10^{-5}	8.13×10^{-6}	1.13×10^{-5}	1.10×10^{-5}	1.54×10^{-5}	1.61×10^{-5}
Constant	4.24×10^{-3} **	4.26×10^{-3} **	4.38×10^{-3} **	4.36×10^{-3} **	4.32×10^{-3} **	4.48×10^{-3} **	4.25×10^{-3} **	4.31×10^{-3} **	4.37×10^{-3} **	4.85×10^{-3} **	4.51×10^{-3} **	4.11×10^{-3} **	4.19×10^{-3} **	4.26×10^{-3} **	4.29×10^{-3} **	4.40×10^{-3} **
	8.52×10^{-5}	8.47×10^{-5}	8.33×10^{-5}	8.29×10^{-5}	8.30×10^{-5}	8.20×10^{-5}	8.24×10^{-5}	8.27×10^{-5}	8.32×10^{-5}	8.42×10^{-5}	8.29×10^{-5}	8.39×10^{-5}	8.40×10^{-5}	8.28×10^{-5}	8.28×10^{-5}	8.40×10^{-5}
R-squared	0.0464	0.0420	0.0193	0.0153	0.0174	0.0259	0.0400	0.0308	0.0148	0.0374	0.0181	0.0554	0.0374	0.0228	0.0141	0.0406
Panel B. High ESG scores																
COVID	9.17×10^{-3} **	6.43×10^{-3} **	6.29×10^{-3} **	6.44×10^{-3} **	7.38×10^{-3} **	1.16×10^{-2} **	6.65×10^{-3} **	6.16×10^{-3} **	6.13×10^{-3} **	7.87×10^{-3} **	6.51×10^{-3} **	6.88×10^{-3} **	6.93×10^{-3} **	8.12×10^{-3} **	7.38×10^{-3} **	6.90×10^{-3} **
	4.44×10^{-4}	2.97×10^{-4}	3.01×10^{-4}	2.86×10^{-4}	3.13×10^{-4}	4.72×10^{-4}	3.03×10^{-4}	2.79×10^{-4}	2.90×10^{-4}	3.41×10^{-4}	2.85×10^{-4}	3.05×10^{-4}	3.13×10^{-4}	3.26×10^{-4}	3.13×10^{-4}	3.16×10^{-4}
Index_low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Index_high	6.33×10^{-3} **	4.17×10^{-3} **	4.15×10^{-3} **	3.88×10^{-3} **	4.13×10^{-3} **	6.57×10^{-3} **	4.05×10^{-3} **	3.79×10^{-3} **	4.06×10^{-3} **	4.39×10^{-3} **	3.84×10^{-3} **	4.12×10^{-3} **	4.11×10^{-3} **	4.48×10^{-3} **	4.11×10^{-3} **	4.25×10^{-3} **
	1.12×10^{-4}	7.68×10^{-5}	7.88×10^{-5}	7.81×10^{-5}	8.86×10^{-5}	1.29×10^{-4}	8.31×10^{-5}	7.53×10^{-5}	7.51×10^{-5}	9.79×10^{-5}	7.86×10^{-5}	8.34×10^{-5}	8.75×10^{-5}	9.10×10^{-5}	8.91×10^{-5}	8.59×10^{-5}
WGI_high	1.58×10^{-2} **	7.83×10^{-3} **	9.79×10^{-3} **	1.46×10^{-2} **	1.68×10^{-2} **	3.07×10^{-2} **	1.50×10^{-2} **	1.18×10^{-2} **	1.18×10^{-2} **	1.81×10^{-2} **	1.42×10^{-2} **	9.73×10^{-3} **	9.73×10^{-3} **	1.87×10^{-2} **	1.36×10^{-2} **	1.02×10^{-2} **
	2.79×10^{-4}	1.44×10^{-4}	1.86×10^{-4}	2.94×10^{-4}	3.61×10^{-4}	6.02×10^{-4}	3.08×10^{-4}	2.35×10^{-4}	2.19×10^{-4}	4.04×10^{-4}	2.92×10^{-4}	1.97×10^{-4}	2.07×10^{-4}	3.81×10^{-4}	2.94×10^{-4}	2.06×10^{-4}
Index_low* WGI_high	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Index_high* WGI_high	1.58×10^{-2} **	7.83×10^{-3} **	9.79×10^{-3} **	1.46×10^{-2} **	1.68×10^{-2} **	3.07×10^{-2} **	1.50×10^{-2} **	1.18×10^{-2} **	1.18×10^{-2} **	1.81×10^{-2} **	1.42×10^{-2} **	9.73×10^{-3} **	9.73×10^{-3} **	1.87×10^{-2} **	1.36×10^{-2} **	1.02×10^{-2} **
	2.79×10^{-4}	1.44×10^{-4}	1.86×10^{-4}	2.94×10^{-4}	3.61×10^{-4}	6.02×10^{-4}	3.08×10^{-4}	2.35×10^{-4}	2.19×10^{-4}	4.04×10^{-4}	2.92×10^{-4}	1.97×10^{-4}	2.07×10^{-4}	3.81×10^{-4}	2.94×10^{-4}	2.06×10^{-4}
Δ ESG	-9.25×10^{-4} **	2.62×10^{-4} **	5.61×10^{-4} **	2.09×10^{-4} **	4.67×10^{-4} **	8.06×10^{-5}	4.07×10^{-4} **	4.19×10^{-4} **	3.38×10^{-4} **	3.31×10^{-4} **	2.21×10^{-4} **	3.12×10^{-6}	2.36×10^{-5}	1.29×10^{-5}	2.26×10^{-4} **	-6.99×10^{-5} **
	1.06×10^{-4}	3.54×10^{-5}	2.44×10^{-5}	1.37×10^{-5}	1.90×10^{-5}	7.89×10^{-5}	2.39×10^{-5}	1.29×10^{-5}	2.37×10^{-5}	1.47×10^{-5}	2.08×10^{-5}	2.51×10^{-5}	2.64×10^{-5}	2.01×10^{-5}	2.06×10^{-5}	2.00×10^{-5}
Constant	6.33×10^{-3} **	4.17×10^{-3} **	4.15×10^{-3} **	3.88×10^{-3} **	4.13×10^{-3} **	6.57×10^{-3} **	4.05×10^{-3} **	3.79×10^{-3} **	4.06×10^{-3} **	4.39×10^{-3} **	3.84×10^{-3} **	4.12×10^{-3} **	4.11×10^{-3} **	4.48×10^{-3}	4.11×10^{-3} **	4.25×10^{-3} **
	1.12×10^{-4}	7.68×10^{-5}	7.88×10^{-5}	7.81×10^{-5}	8.86×10^{-5}	1.29×10^{-4}	8.31×10^{-5}	7.53×10^{-5}	7.51×10^{-5}	9.79×10^{-5}	7.86×10^{-5}	8.34×10^{-5}	8.75×10^{-5}	9.10×10^{-5}	8.91×10^{-5}	8.59×10^{-5}
R-squared	0.0299	0.0175	0.0198	0.0248	0.0283	0.0490	0.0257	0.0215	0.0217	0.0303	0.0244	0.0197	0.0198	0.0310	0.0245	0.0204

Table A21. *Cont.*

	CS	S	EPS	RU	E	I	SPS	W	HR	Co	PR	GPS	M	Sh	CSR_S	CoS
								Panel C. Low ESG scores								
COVID	1.30×10^{-2} **	1.27×10^{-2} **	9.65×10^{-3} **	8.99×10^{-3} **	1.01×10^{-2} **	7.73×10^{-3} **	1.20×10^{-2} **	8.89×10^{-3} **	8.16×10^{-3} **	2.21×10^{-2} **	1.03×10^{-2} **	9.33×10^{-3} **	1.05×10^{-2} **	7.32×10^{-3} **	8.70×10^{-3} **	1.12×10^{-2} **
	6.16×10^{-4}	5.81×10^{-4}	4.20×10^{-4}	3.90×10^{-4}	4.27×10^{-4}	3.59×10^{-4}	6.08×10^{-4}	4.60×10^{-4}	3.60×10^{-4}	9.68×10^{-4}	5.31×10^{-4}	4.64×10^{-4}	4.61×10^{-4}	3.39×10^{-4}	3.85×10^{-4}	4.68×10^{-4}
Index_low	8.31×10^{-3} **	7.84×10^{-3} **	5.59×10^{-3} **	5.18×10^{-3} **	5.70×10^{-3} **	4.80×10^{-3} **	8.30×10^{-3} **	6.20×10^{-3} **	4.65×10^{-3} **	1.72×10^{-2} **	7.13×10^{-3} **	6.33×10^{-3} **	6.27×10^{-3} **	4.66×10^{-3} **	5.19×10^{-3} **	6.50×10^{-3} **
	1.65×10^{-4}	1.58×10^{-4}	1.18×10^{-4}	1.09×10^{-4}	1.20×10^{-4}	9.80×10^{-5}	1.58×10^{-4}	1.21×10^{-4}	1.02×10^{-4}	1.51×10^{-4}	1.40×10^{-4}	1.22×10^{-4}	1.26×10^{-4}	9.00×10^{-5}	1.06×10^{-4}	1.27×10^{-4}
Index_high	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WGI_high	1.33×10^{-2} **	1.10×10^{-2} **	8.66×10^{-3} **	9.44×10^{-3} **	1.14×10^{-2} **	1.07×10^{-2} **	1.24×10^{-2} **	1.36×10^{-2} **	9.72×10^{-3} **	2.21×10^{-2} **	1.13×10^{-2} **	9.49×10^{-3} **	9.40×10^{-3} **	1.26×10^{-2} **	1.21×10^{-2} **	5.20×10^{-2} **
	2.65×10^{-4}	2.21×10^{-4}	1.82×10^{-4}	1.99×10^{-4}	2.40×10^{-4}	2.19×10^{-4}	2.37×10^{-4}	2.66×10^{-4}	2.14×10^{-4}	1.94×10^{-4}	2.23×10^{-4}	1.83×10^{-4}	1.88×10^{-4}	2.44×10^{-4}	2.47×10^{-4}	1.02×10^{-3}
Index_low* WGI_high	1.33×10^{-2} **	1.10×10^{-2} **	8.66×10^{-3} **	9.44×10^{-3} **	1.14×10^{-2} **	1.07×10^{-2} **	1.24×10^{-2} **	1.36×10^{-2} **	9.72×10^{-3} **	2.21×10^{-2} **	1.13×10^{-2} **	9.49×10^{-3} **	9.40×10^{-3} **	1.26×10^{-2} **	1.21×10^{-2} **	5.20×10^{-2} **
	2.65×10^{-4}	2.21×10^{-4}	1.82×10^{-4}	1.99×10^{-4}	2.40×10^{-4}	2.19×10^{-4}	2.37×10^{-4}	2.66×10^{-4}	2.14×10^{-4}	1.94×10^{-4}	2.23×10^{-4}	1.83×10^{-4}	1.88×10^{-4}	2.44×10^{-4}	2.47×10^{-4}	1.02×10^{-3}
Index_high* WGI_high	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Δ ESG	2.41×10^{-3} **	3.48×10^{-3} **	6.18×10^{-4} **	8.28×10^{-4} **	7.86×10^{-4} **	5.76×10^{-4} **	1.73×10^{-3} **	1.29×10^{-3} **	4.14×10^{-4} **	2.13×10^{-3} **	1.62×10^{-3} **	-7.16×10^{-4} **	-8.06×10^{-4} **	1.88×10^{-4} **	1.15×10^{-3} **	-1.82×10^{-3} **
	1.51×10^{-4}	1.74×10^{-4}	2.34×10^{-5}	3.06×10^{-5}	4.05×10^{-5}	3.68×10^{-5}	9.28×10^{-5}	9.35×10^{-5}	2.22×10^{-5}	1.28×10^{-4}	6.55×10^{-5}	7.67×10^{-5}	5.56×10^{-5}	3.38×10^{-5}	4.12×10^{-5}	9.24×10^{-5}
Constant	8.31×10^{-3} **	7.84×10^{-3} **	5.59×10^{-3} **	5.18×10^{-3} **	5.70×10^{-3} **	4.80×10^{-3} **	8.30×10^{-3} **	6.20×10^{-3} **	4.65×10^{-3} **	1.72×10^{-2} **	7.13×10^{-3} **	6.33×10^{-3} **	6.27×10^{-3} **	4.66×10^{-3} **	5.19×10^{-3} **	6.50×10^{-3} **
	1.65×10^{-4}	1.58×10^{-4}	1.18×10^{-4}	1.09×10^{-4}	1.20×10^{-4}	9.80×10^{-5}	1.58×10^{-4}	1.21×10^{-4}	1.02×10^{-4}	1.51×10^{-4}	1.40×10^{-4}	1.22×10^{-4}	1.26×10^{-4}	9.00×10^{-5}	1.06×10^{-4}	1.27×10^{-4}
R-squared	0.0261	0.0240	0.0172	0.0174	0.0201	0.0175	0.0246	0.0222	0.0166	0.0453	0.0217	0.0179	0.0183	0.0187	0.0197	0.0560

Notes. (1) Results concern model 3; the portfolios concern the companies with the highest and lowest average ESG-specific scores (10–12 and 1–4, respectively) as well as across the full sample (with all variables weighted based on the category of volume of ESG score (1–4 low; 5–9 middle; and 10–12 high), across all countries. (2) ** refers to 5% of statistical significance.

Table A22. Cross-sectional results for risk-adjusted returns against ESG score indices and WGI_high.

	CS	S	EPS	RU	E	I	SPS	W	HR	Co	PR	GPS	M	Sh	CSR_S	CoS
Panel A. Full sample																
COVID	2.02×10^{-1} **	2.01×10^{-1} **	1.91×10^{-1} **	1.90×10^{-1} **	1.95×10^{-1} **	1.90×10^{-1} **	1.95×10^{-1} **	1.92×10^{-1} **	1.87×10^{-1} **	1.89×10^{-1} **	1.87×10^{-1} **	2.07×10^{-1} **	2.04×10^{-1} **	2.04×10^{-1} **	1.98×10^{-1} **	2.02×10^{-1} **
	5.72×10^{-2}	5.60×10^{-2}	5.38×10^{-2}	5.35×10^{-2}	5.44×10^{-2}	5.20×10^{-2}	5.58×10^{-2}	5.42×10^{-2}	5.32×10^{-2}	5.38×10^{-2}	5.29×10^{-2}	5.72×10^{-2}	5.63×10^{-2}	5.49×10^{-2}	5.47×10^{-2}	5.37×10^{-2}
Index_low	4.09×10^{0} **	4.63×10^{0} **	9.82×10^{-1} **	9.84×10^{-1} **	1.19×10^{0} **	3.44×10^{-1} **	3.56×10^{0} **	2.88×10^{0} **	4.43×10^{-1} **	3.18×10^{0} **	1.13×10^{0} **	5.60×10^{0} **	3.62×10^{0} **	1.66×10^{0} **	8.95×10^{-1} **	3.98×10^{0} **
	4.74×10^{-1}	5.38×10^{-1}	1.17×10^{-1}	1.16×10^{-1}	1.41×10^{-1}	4.02×10^{-2}	4.17×10^{-1}	3.31×10^{-1}	5.19×10^{-2}	3.73×10^{-1}	1.32×10^{-1}	6.41×10^{-1}	4.21×10^{-1}	1.95×10^{-1}	1.05×10^{-1}	4.66×10^{-1}
Index_high	6.55×10^{0} **	2.16×10^{0} **	9.22×10^{-1} **	4.76×10^{-1} **	5.44×10^{-1} **	2.14×10^{0} **	8.66×10^{-1} **	4.22×10^{-1} **	9.56×10^{-1} **	3.35×10^{-1} **	5.88×10^{-1} **	1.29×10^{0} **	7.24×10^{-1} **	6.85×10^{-1} **	4.75×10^{-1} **	2.65×10^{-1} **
	7.58×10^{-1}	2.51×10^{-1}	1.10×10^{-1}	5.62×10^{-2}	6.42×10^{-2}	2.50×10^{-1}	1.01×10^{-1}	4.86×10^{-2}	1.12×10^{-1}	3.93×10^{-2}	6.84×10^{-2}	1.48×10^{-1}	8.42×10^{-2}	8.04×10^{-2}	5.57×10^{-2}	3.10×10^{-2}
WGI_high	4.82×10^{-1} **	4.70×10^{-1} **	4.35×10^{-1} **	4.42×10^{-1} **	4.50×10^{-1} **	4.41×10^{-1} **	4.76×10^{-1} **	4.64×10^{-1} **	4.45×10^{-1} **	4.49×10^{-1} **	4.41×10^{-1} **	4.87×10^{-1} **	4.72×10^{-1} **	4.78×10^{-1} **	4.61×10^{-1} **	4.51×10^{-1} **
	5.58×10^{-2}	5.46×10^{-2}	5.17×10^{-2}	5.22×10^{-2}	5.31×10^{-2}	5.15×10^{-2}	5.58×10^{-2}	5.35×10^{-2}	5.21×10^{-2}	5.27×10^{-2}	5.13×10^{-2}	5.57×10^{-2}	5.49×10^{-2}	5.60×10^{-2}	5.41×10^{-2}	5.27×10^{-2}
Index_low* WGI_high	1.16×10^{1} **	1.31×10^{1} **	2.73×10^{0} **	2.78×10^{0} **	3.37×10^{0} **	9.87×10^{-1} **	1.03×10^{1} **	8.22×10^{0} **	1.26×10^{0} **	9.03×10^{0} **	3.19×10^{0} **	1.58×10^{1} **	1.02×10^{1} **	4.90×10^{0} **	2.57×10^{0} **	1.13×10^{1} **
	1.34×10^{0}	1.52×10^{0}	3.25×10^{-1}	3.28×10^{-1}	3.98×10^{-1}	1.15×10^{-1}	1.21×10^{0}	9.48×10^{-1}	1.47×10^{-1}	1.06×10^{0}	3.71×10^{-1}	1.81×10^{0}	1.19×10^{0}	5.75×10^{-1}	3.01×10^{-1}	1.33×10^{0}
Index_high* WGI_high	1.85×10^{1} **	6.11×10^{0} **	2.57×10^{0} **	1.35×10^{0} **	1.54×10^{0} **	6.14×10^{0} **	2.51×10^{0} **	1.21×10^{0} **	2.71×10^{0} **	9.50×10^{-1} **	1.65×10^{0} **	3.65×10^{0} **	2.05×10^{0} **	2.02×10^{0} **	1.36×10^{0} **	7.56×10^{-1} **
	2.14×10^{0}	7.10×10^{-1}	3.06×10^{-1}	1.59×10^{-1}	1.82×10^{-1}	7.17×10^{-1}	2.94×10^{-1}	1.39×10^{-1}	3.18×10^{-1}	1.11×10^{-1}	1.92×10^{-1}	4.18×10^{-1}	2.38×10^{-1}	2.37×10^{-1}	1.60×10^{-1}	8.83×10^{-2}
Δ ESG	6.06×10^{-3} **	5.62×10^{-3} **	1.16×10^{-2} **	1.54×10^{-2} **	9.12×10^{-3} **	-1.11×10^{-2} **	9.41×10^{-3} **	8.34×10^{-3} **	2.48×10^{-2} **	1.15×10^{-2} **	6.23×10^{-3} **	4.90×10^{-3} **	3.98×10^{-3} **	-4.45×10^{-3} **	1.96×10^{-2} **	2.03×10^{-3}
	7.54×10^{-4}	8.00×10^{-4}	1.36×10^{-3}	1.97×10^{-3}	1.44×10^{-3}	3.05×10^{-3}	1.15×10^{-3}	2.04×10^{-3}	5.62×10^{-3}	2.66×10^{-3}	1.68×10^{-3}	1.45×10^{-3}	1.89×10^{-3}	1.80×10^{-3}	2.84×10^{-3}	2.52×10^{-3}
Constant	1.70×10^{-1} **	1.66×10^{-1} **	1.56×10^{-1} **	1.56×10^{-1} **	1.59×10^{-1} **	1.54×10^{-1} **	1.64×10^{-1} **	1.62×10^{-1} **	1.57×10^{-1} **	1.58×10^{-1} **	1.57×10^{-1} **	1.72×10^{-1} **	1.67×10^{-1} **	1.62×10^{-1} **	1.61×10^{-1} **	1.58×10^{-1} **
	1.97×10^{-2}	1.93×10^{-2}	1.86×10^{-2}	1.85×10^{-2}	1.88×10^{-2}	1.79×10^{-2}	1.92×10^{-2}	1.87×10^{-2}	1.84×10^{-2}	1.86×10^{-2}	1.82×10^{-2}	1.97×10^{-2}	1.94×10^{-2}	1.90×10^{-2}	1.89×10^{-2}	1.85×10^{-2}
R-squared	0.0387	0.0250	0.0225	0.0179	0.0209	0.0291	0.0338	0.0252	0.0174	0.0267	0.0206	0.0253	0.0326	0.0283	0.0172	0.0320
Panel B. High ESG scores																
COVID	6.53×10^{-2}	1.03×10^{-1} *	1.81×10^{-1} **	1.71×10^{-1} **	1.65×10^{-1} **	1.15×10^{-1} **	1.48×10^{-1} **	1.80×10^{-1} **	1.39×10^{-1} **	1.77×10^{-1} **	1.66×10^{-1} **	1.43×10^{-1} **	2.07×10^{-1} **	1.61×10^{-1} **	1.63×10^{-1} **	2.28×10^{-1} **
	5.73×10^{-2}	5.80×10^{-2}	5.89×10^{-2}	5.92×10^{-2}	5.92×10^{-2}	5.80×10^{-2}	5.84×10^{-2}	5.94×10^{-2}	5.81×10^{-2}	5.95×10^{-2}	5.86×10^{-2}	5.86×10^{-2}	5.90×10^{-2}	5.85×10^{-2}	5.92×10^{-2}	5.90×10^{-2}
Index_low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Index_high	7.19×10^{-2} **	1.11×10^{-1} **	1.46×10^{-1} **	1.68×10^{-1} **	1.70×10^{-1} **	1.08×10^{-1} **	1.31×10^{-1} **	1.76×10^{-1} **	1.31×10^{-1} **	1.63×10^{-1} **	1.49×10^{-1} **	1.38×10^{-1} **	1.58×10^{-1} **	1.37×10^{-1} **	1.53×10^{-1} **	1.55×10^{-1} **
	1.99×10^{-2}	2.01×10^{-2}	2.04×10^{-2}	2.04×10^{-2}	2.04×10^{-2}	2.01×10^{-2}	2.03×10^{-2}	2.05×10^{-2}	2.01×10^{-2}	2.05×10^{-2}	2.03×10^{-2}	2.03×10^{-2}	2.04×10^{-2}	2.03×10^{-2}	2.05×10^{-2}	2.04×10^{-2}
WGI_high	1.80×10^{-1} **	2.09×10^{-1} **	3.44×10^{-1} **	6.31×10^{-1} **	6.90×10^{-1} **	5.03×10^{-1} **	4.86×10^{-1} **	5.49×10^{-1} **	3.82×10^{-1} **	6.72×10^{-1} **	5.53×10^{-1} **	3.26×10^{-1} **	3.75×10^{-1} **	5.74×10^{-1} **	5.05×10^{-1} **	3.72×10^{-1} **
	4.98×10^{-2}	3.77×10^{-2}	4.81×10^{-2}	7.69×10^{-2}	8.31×10^{-2}	9.40×10^{-2}	7.49×10^{-2}	6.39×10^{-2}	5.85×10^{-2}	8.48×10^{-2}	7.52×10^{-2}	4.80×10^{-2}	4.83×10^{-2}	8.47×10^{-2}	6.75×10^{-2}	4.90×10^{-2}
Index_low* WGI_high	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Index_high* WGI_high	1.80×10^{-1} **	2.09×10^{-1} **	3.44×10^{-1} **	6.31×10^{-1} **	6.90×10^{-1} **	5.03×10^{-1} **	4.86×10^{-1} **	5.49×10^{-1} **	3.82×10^{-1} **	6.72×10^{-1} **	5.53×10^{-1} **	3.26×10^{-1} **	3.75×10^{-1} **	5.74×10^{-1} **	5.05×10^{-1} **	3.72×10^{-1} **
	4.98×10^{-2}	3.77×10^{-2}	4.81×10^{-2}	7.69×10^{-2}	8.31×10^{-2}	9.40×10^{-2}	7.49×10^{-2}	6.39×10^{-2}	5.85×10^{-2}	8.48×10^{-2}	7.52×10^{-2}	4.80×10^{-2}	4.83×10^{-2}	8.47×10^{-2}	6.75×10^{-2}	4.90×10^{-2}
Δ ESG	-2.35×10^{-2} *	6.55×10^{-3}	1.50×10^{-2} **	8.68×10^{-3} **	1.67×10^{-2} **	1.18×10^{-2}	1.63×10^{-2} **	2.18×10^{-2} **	5.51×10^{-3}	1.26×10^{-2} **	8.72×10^{-3} **	-3.49×10^{-3}	-5.24×10^{-3}	-2.85×10^{-3}	1.23×10^{-2} **	1.84×10^{-3}
	1.28×10^{-2}	6.44×10^{-3}	4.86×10^{-3}	2.71×10^{-3}	3.61×10^{-3}	8.74×10^{-3}	4.46×10^{-3}	2.97×10^{-3}	4.56×10^{-3}	2.55×10^{-3}	3.98×10^{-3}	4.42×10^{-3}	4.56×10^{-3}	3.25×10^{-3}	3.61×10^{-3}	3.45×10^{-3}
Constant	7.19×10^{-2} **	1.11×10^{-1} **	1.46×10^{-1} **	1.68×10^{-1} **	1.70×10^{-1} **	1.08×10^{-1} **	1.31×10^{-1} **	1.76×10^{-1} **	1.31×10^{-1} **	1.63×10^{-1} **	1.49×10^{-1} **	1.38×10^{-1} **	1.58×10^{-1} **	1.37×10^{-1} **	1.53×10^{-1} **	1.55×10^{-1} **
	1.99×10^{-2}	2.01×10^{-2}	2.04×10^{-2}	2.04×10^{-2}	2.04×10^{-2}	2.01×10^{-2}	2.03×10^{-2}	2.05×10^{-2}	2.01×10^{-2}	2.05×10^{-2}	2.03×10^{-2}	2.03×10^{-2}	2.04×10^{-2}	2.03×10^{-2}	2.05×10^{-2}	2.04×10^{-2}
R-squared	0.0286	0.0352	0.0209	0.0308	0.0329	0.0249	0.0250	0.0285	0.0211	0.0323	0.0278	0.0192	0.0223	0.0281	0.0262	0.0225

Table A22. *Cont.*

	CS	S	EPS	RU	E	I	SPS	W	HR	Co	PR	GPS	M	Sh	CSR_S	CoS
								Panel C. Low ESG scores								
COVID	1.97×10^{-1} **	1.63×10^{-1} **	2.27×10^{-1} **	2.18×10^{-1} **	2.17×10^{-1} **	2.25×10^{-1} **	1.96×10^{-1} **	2.12×10^{-1} **	1.99×10^{-1} **	6.34×10^{-2} **	1.77×10^{-1} **	1.73×10^{-1} **	1.65×10^{-1} **	2.01×10^{-1} **	2.58×10^{-1} **	9.83×10^{-2} *
	5.76×10^{-2}	5.74×10^{-2}	5.84×10^{-2}	5.84×10^{-2}	5.85×10^{-2}	5.91×10^{-2}	5.73×10^{-2}	5.79×10^{-2}	5.91×10^{-2}	2.18×10^{-2}	5.76×10^{-2}	5.73×10^{-2}	5.79×10^{-2}	5.84×10^{-2}	5.87×10^{-2}	5.78×10^{-2}
Index_low	9.07×10^{-2} **	9.18×10^{-2} **	1.37×10^{-1} **	1.37×10^{-1} **	1.23×10^{-1} **	1.58×10^{-1} **	9.51×10^{-2} **	1.13×10^{-1} **	1.62×10^{-1} **	3.91×10^{-2} **	1.02×10^{-1} **	1.07×10^{-1} **	9.85×10^{-2} **	1.44×10^{-1} **	1.46×10^{-1} **	1.12×10^{-1} **
	2.00×10^{-2}	2.00×10^{-2}	2.02×10^{-2}	2.03×10^{-2}	2.03×10^{-2}	2.04×10^{-2}	2.00×10^{-2}	2.01×10^{-2}	2.04×10^{-2}	7.57×10^{-3}	2.00×10^{-2}	1.99×10^{-2}	2.02×10^{-2}	2.02×10^{-2}	2.04×10^{-2}	2.01×10^{-2}
Index_high	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WGI_high	1.45×10^{-1} **	1.29×10^{-1} **	2.13×10^{-1} **	2.50×10^{-1} **	2.45×10^{-1} **	3.52×10^{-1} **	1.43×10^{-1} **	2.49×10^{-1} **	3.38×10^{-1} **	5.03×10^{-2} **	1.62×10^{-1} **	1.60×10^{-1} **	1.48×10^{-1} **	3.91×10^{-1} **	3.41×10^{-1} **	8.99×10^{-1} **
	3.21×10^{-2}	2.80×10^{-2}	3.14×10^{-2}	3.69×10^{-2}	4.07×10^{-2}	4.56×10^{-2}	2.99×10^{-2}	4.43×10^{-2}	4.27×10^{-2}	9.73×10^{-3}	3.18×10^{-2}	2.99×10^{-2}	3.02×10^{-2}	5.49×10^{-2}	4.75×10^{-2}	1.60×10^{-1}
Index_low* WGI_high	1.45×10^{-1} **	1.29×10^{-1} **	2.13×10^{-1} **	2.50×10^{-1} **	2.45×10^{-1} **	3.52×10^{-1} **	1.43×10^{-1} **	2.49×10^{-1} **	3.38×10^{-1} **	5.03×10^{-2} **	1.62×10^{-1} **	1.60×10^{-1} **	1.48×10^{-1} **	3.91×10^{-1} **	3.41×10^{-1} **	8.99×10^{-1} **
	3.21×10^{-2}	2.80×10^{-2}	3.14×10^{-2}	3.69×10^{-2}	4.07×10^{-2}	4.56×10^{-2}	2.99×10^{-2}	4.43×10^{-2}	4.27×10^{-2}	9.73×10^{-3}	3.18×10^{-2}	2.99×10^{-2}	3.02×10^{-2}	5.49×10^{-2}	4.75×10^{-2}	1.60×10^{-1}
Index_high* WGI_high	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Δ ESG	4.70×10^{-2} **	2.28×10^{-2}	2.23×10^{-2} **	2.96×10^{-2} **	3.33×10^{-2} **	1.61×10^{-2} **	3.35×10^{-2} **	2.57×10^{-2} **	1.34×10^{-2} **	8.32×10^{-3} **	2.74×10^{-2} **	-4.90×10^{-4}	-1.42×10^{-2} **	1.68×10^{-3}	2.60×10^{-2} **	-3.56×10^{-2} **
	1.36×10^{-2}	1.70×10^{-2}	3.32×10^{-3}	4.70×10^{-3}	5.37×10^{-3}	5.83×10^{-3}	8.68×10^{-3}	1.14×10^{-2}	3.54×10^{-3}	2.75×10^{-3}	7.37×10^{-3}	8.97×10^{-3}	6.64×10^{-3}	5.40×10^{-3}	6.55×10^{-3}	1.10×10^{-2}
Constant	9.07×10^{-2} **	9.18×10^{-2} **	1.37×10^{-1} **	1.37×10^{-1} **	1.23×10^{-1} **	1.58×10^{-1} **	9.51×10^{-2} **	1.13×10^{-1} **	1.62×10^{-1} **	3.91×10^{-2} **	1.02×10^{-1} **	1.07×10^{-1} **	9.85×10^{-2} **	1.44×10^{-1} **	1.46×10^{-1} **	1.12×10^{-1} **
	2.00×10^{-2}	2.00×10^{-2}	2.02×10^{-2}	2.03×10^{-2}	2.03×10^{-2}	2.04×10^{-2}	2.00×10^{-2}	2.01×10^{-2}	2.04×10^{-2}	7.57×10^{-3}	2.00×10^{-2}	1.99×10^{-2}	2.02×10^{-2}	2.02×10^{-2}	2.04×10^{-2}	2.01×10^{-2}
R-squared	0.0248	0.0118	0.0165	0.0178	0.0174	0.0216	0.0129	0.0172	0.0208	0.0086	0.0133	0.0129	0.0120	0.0220	0.0216	0.0280

Notes. (1) Results concern model 3; the portfolios concern the companies with the highest and lowest average ESG-specific scores (10–12 and 1–4, respectively) as well as across the full sample (with all variables weighted based on the category of volume of ESG score (1–4 low; 5–9 middle; and 10–12 high), across all countries. (2) ** and * refer to 5% and 10% levels of statistical significance, respectively.

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