

Do markets care more about governance than the environment? Evidence from global ESG incidents

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Abstract. This paper empirically explores the impact of Environmental, Social, and Governance (ESG) incidents on stock returns. Utilizing a dataset spanning 16 years from RepRisk, this research analyzes the daily abnormal returns of 24,547 listed companies worldwide. The results indicate that the market reaction to ESG incidents is generally short-lived, with significant price corrections occurring primarily within a three-day window following the event. This research documents a distinct heterogeneity across ESG pillars: Governance (G), specifically those involving anticompetitive behavior and controversial products and services, precipitating immediate and significant stock price declines. Conversely, Environmental (E) incidents show statistically insignificant short-term impacts. While the aggregate Social (S) category shows mixed results, specific sub-categories such as forced labor and animal cruelty trigger significant negative market reactions. In summary, while ESG receives widespread attention, short-term market volatility is predominantly driven by governance failures.

Keywords: ESG Incidents, stock returns, event study, governance, market reaction

1. Introduction

The United Nations' adoption of the *17 Sustainable Development Goals* (SDG) in 2015 [1] marked a pivotal shift in global finance. Since then, the integration of Environmental, Social, and Governance (ESG) criteria into investment decision-making has moved from niche to mainstream. An increasing number of fund managers have signed the *Principles for Responsible Investment* [2], committing to capital allocation strategies that favor sustainable projects. Given the significant capital inflows into ESG-themed assets, the sensitivity of stock prices to negative ESG disclosures has become a critical area of study. When adverse news breaks, capital withdrawal often leads to price depreciation. For instance, Glossner [3] documented that severe ESG incidents can depress annualized returns by approximately 3.5%. Similarly, Krüger [4] finds that negative ESG events trigger significant negative stock price reactions, while Capelle-Blancard and Petit [5] document heterogeneous market responses across different ESG dimensions. However, existing literature often fails to granularly address two key issues: (1) the precise duration of the price decline, and (2) the comparative market sensitivity to specific categories of ESG incidents (E, S, or G). The significance of this paper lies in addressing the two aforementioned issues.

The approach utilizes data from RepRisk, which documents historical ESG incidents for 24,547 listed companies worldwide during 2007 and 2023. The authors leverage this dataset to identify the impact of these incidents on the companies' daily abnormal stock returns, calculated by controlling for the Fama-French 5-Factor Model [6]. Ultimately, the findings indicate that a decline in annualized returns of approximately 2.5% is significantly observed within three days of an incident's occurrence, with no discernible downward trend persisting into the fourth or fifth days.

Synthesizing the data, the authors find that a significant decline in the stock market occurs exclusively following Governance (G) incidents. Specifically, stock prices exhibit a continued decline for four days post-incident; subsequently, prices stabilize and do not fall below the average levels observed at the time of the incident. The authors observe that stock prices begin to decline on the day of an ESG event and gradually recover thereafter, indicating a transient, short-term effect. In the analysis of stock price depreciation triggered by ESG incidents, the authors find that Environmental (E) and Social (S) incidents exert negligible influence on stock trends; only G-related incidents precipitate a significant short-term drop in stock prices following their occurrence.

In the following sections, the paper is organized as follows: Part 2 elaborates on the research methodology and data sources; Part 3 presents and discusses the main and cross-sectional empirical results; and Part 4 provides the conclusion.

2. Research design

In this section, the authors outline the fundamental approach of the research, which relies on the event study methodology. First, the authors detail the data sources: the authors utilize RepRisk's comprehensive database, which extends 16 years and covers more than 24,547 listed companies globally with 914,578 incidence observations. This provides a sufficiently large and robust sample of reported ESG incidents. This rigorous process guarantees the quality and reliability of the data. Next, the authors clarify the methodological approach. The authors calculate daily abnormal stock returns by controlling for the Fama-French 5-Factor Model [6]. The authors explicitly specify how market risk, firm size, book-to-market ratio, profitability, and investment patterns are operationalized to isolate ESG-related effects. Furthermore, the authors detail the empirical strategies, which involve employing event study methods to document stock price movements around event dates (-5, +5), and multivariate regressions to deconstruct the joint effects of Environmental (E), Social (S), and Governance (G) incidents. Finally, the authors explain the robustness tests applied to the results, such as sub-sample analyses.

3. Result discussion

3.1. Main result

In this section, the authors present a granular analysis of the findings. The authors introduce the time series of stock price reactions, utilizing both statistical metrics and visual representations of the variables. These analyses reveal that significant drop in stock prices occur primarily within a three-day window; notably, no sustained downward movement is observed after the fourth day.

The authors then perform a cross-sectional comparison, demonstrating that primarily G-related incidents (e.g., executive compensation irregularities, fraud) contribute to these declines. In contrast, E and S incidents (e.g., animal welfare issues, social human rights concerns) generally exert no significant aggregate impact on the market. The authors contextualize these results within the existing literature, positing that governance

concerns may stimulate sharper investor attention due to their direct relevance to managerial integrity and fiduciary responsibility.

Aligning with Glossner [3], who documented that severe ESG incidents lead to a 3.5% annualized return decline, the data supports similar trends. As shown in Figure 1, stock prices exhibit no significant directional trend in the two days prior to the event date, but show a significant decline from the event date onwards. Notably, the decline reaches 5 basis points on the event date (equivalent to an annualized decline of $0.0005 \times 252 = 12.6\%$), which is highly significant ($p < 0.001$) with 99% confidence. Averaged over the window ($0.0004 / 4 \times 252$ trading days), this equates to 2.52% decline, indicating that the conclusion regarding ESG incidents is consistent with existing literature.

3.2. Cross-section result

Next, the authors investigate the specific ESG sub-sectors driving the main results.

3.2.1. Governance

The authors first analyze governance-related regression coefficients (*cum1_ret*) around an ESG event. Prior to the event day (Day 0), coefficients fluctuate near zero. On Day 0, they drop sharply to approximately 6 basis points (15.12%). Post-event, coefficients gradually decline until day 4, demonstrating a significant negative impact with confidence intervals confirming statistical significance ($0.0016 / 5 \times 252 = 8.064\%$). Specific governance issues reveal the following: 1) Anti-Competitive Practices: The coefficient drops to 6 bps post-event with 99% confidence. This indicates that legal and regulatory risks are priced in rapidly by the market. 2) Controversial products and services: The coefficient decreases to 10 bps post-event with 95% confidence, showing a consistent downward trend and indicating that labor rights issues hold a degree of market influence.

3.2.2. Social

The authors then examine social issues. Overall, the Social dimension shows consistent negative fluctuations, with most sub-items exhibiting significant negative values around the event window (specifically on the event date and 1–3 days surrounding it). 1) Forced Labor: A significant negative value (13 bps with 95% confidence) appears on the Event Date. Sustained significant negativity persists 1–4 days after the event (e.g., 5 bps with 99% confidence one day later), indicating the negative effect is ongoing. 2) Animal Cruelty: Significant negative values emerge 1–2 days before the event (e.g., 6 bps with 99% confidence), intensifying 1–2 days after the event (e.g., 11 bps with 95% confidence), and remaining negative even as the effect slightly eases. Specifically, on the event date, the authors observe a loss of 7 bps (99% confidence). Over days 1–3, losses accumulate to 26 basis points (at least 90% confidence). The coefficient drop of 30 basis points on the event date is statistically significant at the 99% level, indicating the market is highly sensitive to animal protection issues.

3.2.3. Environmental

Finally, the authors investigate environmental issues. Unlike common perception, the authors document largely insignificant results in this category. 1) Climate and GHG Pollution: The coefficient fluctuates slightly with a wide confidence interval, and the impact is statistically insignificant. This may be due to the long-term nature of the issue, which leads to limited short-term market reactions. 2) Local pollution not significant.

The authors also studied other event types, including employee welfare, competitive, child labor, money related, Discrimination, Forced Labor, Freedom of Association. Behavior but the authors find no significant results.

4. Conclusion

In conclusion, ESG incidents have a short-term negative effect on stock returns; however, only G-related events cause significant intraday price declines, with no long-term effect persisting beyond a three-day period.

This analysis highlights actionable implications for key stakeholders. For investors, integrating governance metrics into short-term risk management enables more accurate assessment of downside risks, supporting informed portfolio decisions. For corporations, strengthening governance structures—such as anticompetitive behavior and controversial products and services—mitigates stock volatility and enhances resilience during market downturns. For policymakers, industry-specific regulations can standardize governance-related disclosures, addressing sector-specific risks and fostering transparency, ultimately stabilizing market trust.

Finally, the authors suggest directions for future research, including examining regional or industry differences in ESG reactions and investigating the effects of positive ESG events to expand the knowledge of this dynamic field.

References

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Appendix

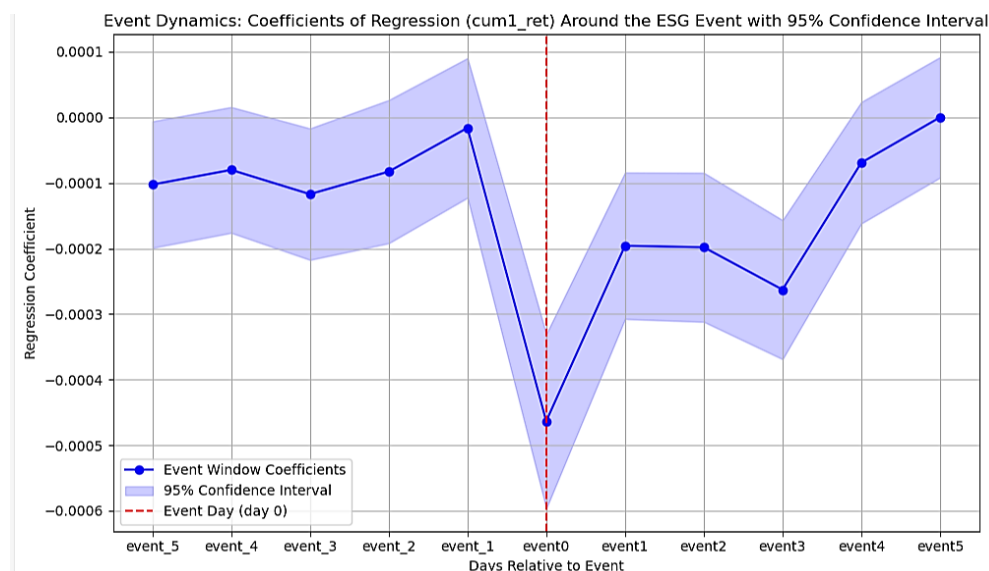


Figure A1. Intertemporal coefficient plot of the abnormal returns around event date

Table A1. Summary of regression results

Issue	5 Days Before	4 Days Before	3 Days Before	2 Days Before	1 Day Before	Every Date
ESG	-0.0001***	0	-0.0001***	0	0	-0.0005***
Governance	0	-0.0002***	-0.0001***	0	0	-0.0006**
Executive Compensation	-0.0005**	-0.0009**	-0.0004***	-0.0002***	0.0003	0
Anticompetitive Behavior	0	-0.0002***	-0.0001***	0	0	-0.0006***
money related	0	-0.0001***	-0.0002***	0.0003	-0.0002***	0
services	0	-0.0003***	0	0.0001	-0.0005***	-0.001**
fraud	-0.0001***	-0.0004***	-0.0002***	-0.0002***	0.0002	0
social (Social)	0	0	0	0	-0.0001	-0.0009
Animal Cruelty	0.0004	-0.0003***	-0.0003***	-0.0006***	-0.0007***	-0.0007*
Forced Labor	0	-0.0002	-0.0001	-0.0002	0	0
Discrimination	-0.0006	0.0006	0.0001	0.0004	0.0012	0.0007***
Freedom of Association	-0.0002	-0.0002***	-0.0001***	-0.0003	0.0002	-0.0002***
competitive	-0.0006	-0.0004***	0.0002	0.0002	-0.0005	0.0003
child labor	0	0	0.0005	0.0002	0.0002	0
controversial	0	-0.0003***	0	-0.0001***	-0.0005**	-0.001*
human	0.0002	-0.0002***	-0.0002	0	0.0001	0.0001
Forced Labor	-0.0004***	0	-0.0003***	-0.0004***	-0.0002***	-0.0013**
Freedom of Association	-0.0002***	-0.0002***	-0.0001***	-0.0003***	0.0002	-0.0002***
Environment	0***	-0.0002	-0.0001	-0.0002	0	0
Climate	-0.0001	0	-0.0002***	-0.0001***	0.0004	-0.0001***
animal	0	0.0002	0.0001	0	0.0004	-0.0008

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A1. Continued

Issue	1 Day After	2 Days After	3 Days After	4 Days After	5 Days After
ESG	0.0002	0.0002	-0.0003***	0	0
Governance	-0.0003***	-0.0003***	-0.0003***	-0.0001***	0
Executive Compensation	0	-0.0004***	-0.0004***	0.0003	-0.0002***
Anticompetitive Behavior	-0.0003***	-0.0003***	-0.0001***	-0.0001***	0
money related	-0.0001***	-0.001**	0.0006	0.0001	0.0001
services	0	-0.0003***	-0.0001***	-0.0002***	0
fraud	0	0.0003	-0.0004***	0.0003	0
social (Social)	-0.0002	-0.0002	-0.0003	-0.0001	0
Animal Cruelty	-0.0011**	-0.0007*	-0.0005**	-0.0003***	0.0003
Forced Labor	0	-0.0002	-0.0002	0.0002	0
Discrimination	0	-0.0009*	0	-0.0002***	0.0006
Freedom of Association	0.0002	-0.0002	-0.0001	0.0003	-0.0002
competitive	-0.001*	-0.0008**	-0.0003***	-0.0003***	-0.0003***
child labor	0.0002	-0.0001	0	0	0
controversial	0	-0.0003***	-0.0001***	-0.0002***	0
human	0	-0.0002***	-0.0002***	-0.0002***	0
Forced Labor	-0.0005***	-0.0004***	-0.0006*	-0.0003***	0
Freedom of Association	0.0002	-0.0002***	-0.0001***	0.0003	-0.0002***
Environment	0	-0.0002	-0.0002	0.0002	0
Climate	0	0	-0.0003***	-0.0004***	-0.0001***
animal	-0.0004	0	-0.0004	0	0

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$