

Impact of ESG Controversy Score on Firm Financial Performance: An Empirical Analysis

Ajay Bhiari Lal Srivastava¹, Ankur Agrawal²

¹ Research Scholar, School of Business Studies, Sharda University Delhi NCR,

Email:abl.srivastava@yahoo.com

²Associate Professor, School of business studies, Sharda University Delhi NCR.

Email:ankur.aggrawal@sharda.ac.in

ABSTRACT

This paper examines the relationship between a firm's ESG controversy score and its financial performance. ESG controversies are negative, publicly reported events relating to a company's environmental, social, or governance conduct, and rating agencies such as LSEG (formerly Refinitiv) convert these events into a numerical controversy score that is used by investors alongside standard ESG ratings. The paper builds a conceptual model linking controversy exposure to profitability, market valuation, and firm risk, and develops testable hypotheses grounded in stakeholder theory, legitimacy theory, and risk management theory. Because primary access to proprietary ESG controversy databases (LSEG, Refinitiv, Bloomberg) was not available for this exercise, the empirical section takes the form of a structured synthesis of quantitative findings reported in peer-reviewed studies published between 2018 and 2025, covering panel data from more than ten countries and industries. The synthesis shows that the direction of the relationship is not uniform: most studies report that ESG controversies reduce firm value and raise firm risk, a smaller number report a short-run positive association driven by media attention and investor overreaction effects, and the moderating role of a firm's underlying ESG performance is mixed. The paper concludes with implications for managers, investors, and regulators, and outlines a methodology that a future primary study with access to firm-level ESG controversy and financial data could follow.....

INTRODUCTION:

Investors, regulators, and company boards increasingly treat environmental, social, and governance (ESG) conduct as material to firm value. Alongside ESG performance scores, which measure how well a company manages sustainability issues, data providers now publish a separate ESG controversy score, which captures negative events reported in global media, such as environmental spills, labour disputes, product safety failures, bribery cases, and governance scandals. Unlike the ESG performance score, which is built from company disclosures, the controversy score is built from independent news sources and is therefore harder for a company to manage through self-reporting.

The financial consequences of ESG controversies are of direct interest to three groups. For investors, controversies raise the possibility of legal costs, regulatory fines, and reputational damage, all of which affect expected cash flows and the discount rate applied to a firm's shares. For managers, controversies raise the question of whether investment in ESG practices provides insurance against the financial fallout of a scandal. For regulators and standard setters, the pattern of results feeds directly into ongoing debates about mandatory sustainability disclosure.

The literature on this question is active but not settled. Early work by Aouadi and Marsat (2018), using a large

international sample, found that firms with more controversies did not necessarily have lower market value, and that the effect depended heavily on firm visibility and prior social performance. More recent studies using longer and more granular panels, particularly those published after 2020, tend to report a negative relationship between controversy exposure and both firm value and profitability, with the ESG performance score acting as a partial buffer. This paper reviews and synthesises that evidence quantitatively, sets out the hypotheses that the literature has tested, and describes the methodology such studies use, so that the overall pattern of findings, along with its limits, is presented in one place.

The paper is organised as follows. Section 2 reviews the literature and develops hypotheses. Section 3 sets out the conceptual framework. Section 4 describes the data and methodology used in this line of research. Section 5 synthesises the empirical findings. Section 6 discusses the results. Section 7 concludes with implications, limitations, and directions for future research.

2. Literature Review and Hypothesis Development

2.1 The ESG controversy score as a construct

The ESG controversy score, as constructed by LSEG, is built from more than twenty controversy topics spanning environmental incidents, employee and human rights disputes, product responsibility failures, business ethics violations, and shareholder disputes (Elamer et al., 2024).

The score is typically reverse-coded, so that a higher score indicates fewer controversies, and it is often combined with the ESG performance score into a single ESG combined score. Because the underlying events are drawn from independent media and legal sources rather than company disclosure, the controversy score is generally treated in the literature as a cleaner, less manipulable signal of actual conduct than self-reported ESG performance data.

2.2 Theoretical perspectives

Three theoretical lenses recur in this literature. Stakeholder theory holds that a firm's long-run value depends on maintaining the trust of employees, customers, regulators, and communities, so a controversy that damages one of these relationships should show up in lower future cash flows. Legitimacy theory holds that firms operate under a social licence, and that a controversy threatens that licence, prompting increased scrutiny, boycotts, or regulatory action. Risk management theory, in contrast, treats a controversy as a shock to firm-specific risk, predicting an increase in earnings volatility, cost of capital, and stock price volatility, independent of any long-run reputational effect. These three perspectives point in the same broad direction, toward a negative relationship between controversies and both value and stability, but they do not agree on the channel or the expected size of the effect.

A competing view, associated with Aouadi and Marsat (2018), argues that controversies can coincide with greater investor and analyst attention, and that firms which are large, closely followed, and already have a strong social performance record can convert that attention into higher valuation, particularly if the market interprets continued coverage as a sign of transparency rather than wrongdoing. This attention-based argument explains why some studies report a positive or insignificant coefficient on the controversy score.

2.3 Controversies and firm value

Nirino et al. (2021) analysed the influence of corporate controversies on firm performance while controlling for prior ESG investment, and found that controversies negatively affect performance, with ESG practices not providing a statistically significant moderating effect. A 2025 study in the *Journal of Financial Reporting and Accounting* similarly found that ESG controversies significantly reduce firm value and increase firm risk, although firms with high underlying ESG scores experienced a less severe impact, particularly on the risk dimension. Elamer et al. (2024), using Tobin's Q as the value measure, examined how governance mechanisms and ESG practices moderate the controversy-performance relationship and confirmed that the direct effect of controversies on value is generally adverse, with strong governance acting as a partial offset.

Against this, a 2024 study on ESG controversies, corporate governance, and the market for corporate control reported a positive coefficient of controversies on a profitability index, estimating that a one standard deviation increase in the controversy score raised profitability by roughly 3.9 percent, a result the authors

linked to the takeover-market discipline that follows high-profile controversies rather than to the controversy itself being beneficial.

H1: A firm's ESG controversy score is significantly associated with its financial performance, with the balance of evidence indicating a negative relationship between the level of controversy exposure and both market valuation and profitability.

2.4 Controversies and firm risk

Several studies separate the value effect from the risk effect. The 2025 *Journal of Financial Reporting and Accounting* study found that controversies increase risk more consistently than they reduce value, and that this risk effect is dampened, but not eliminated, by a strong ESG score. Marsat et al. (2022), focusing specifically on environmental controversies in an international sample, found that stronger environmental performance increased firm resilience when a controversy-driven shock occurred, supporting the idea that ESG performance operates as a form of insurance against controversy-related risk.

H2: ESG controversies are associated with an increase in firm risk, and this relationship is moderated by the firm's underlying ESG performance.

2.5 Controversies, investment efficiency, and governance

A 2025 study using Chinese A-share listed companies over 2007 to 2022 found that ESG controversies significantly reduce firm investment efficiency, operating through higher agency costs and lower audit quality, with financing constraints and internal control quality acting as moderators. A separate 2021 study of 567 listed banks in the United States and Europe over 2016 to 2021 found a positive and statistically significant relationship between the ESG governance sub-pillar and the controversy score, suggesting that governance quality and controversy exposure move together in ways that are not always intuitive, since better-governed firms may also disclose and thus register more incidents.

H3: ESG controversies are associated with lower investment efficiency and are systematically related to governance quality, though the direction of the governance relationship is not uniform across contexts.

3. Conceptual Framework

The conceptual model treats the ESG controversy score as the primary independent variable, financial performance as the dependent variable, and a set of firm-level and country-level factors as controls and moderators. Financial performance is measured in three ways that recur across the literature: accounting profitability, typically return on assets or return on equity; market valuation, typically Tobin's Q or market-to-book value; and firm risk, typically stock return volatility or a default risk proxy. The ESG performance score, firm size, leverage, industry membership, and country-level governance quality are treated as moderating or control variables, since several studies show that the controversy-performance relationship differs between environmentally sensitive industries and other sectors, and between emerging and developed markets.

The framework implies a set of paths: a direct path from controversy score to performance and risk; an interaction path in which ESG performance moderates the strength of that direct path; and a set of control paths through firm size, leverage, and country governance quality. This structure matches the panel regression and multilevel model specifications used in the underlying studies reviewed in this paper.

4. Data and Methodology

4.1 Approach used in this paper

This paper does not run a new primary regression, because primary firm-level ESG controversy data is held in proprietary databases (LSEG/Refinitiv Eikon, Bloomberg ESG) that were not accessible for this exercise, and fabricating such a dataset would misrepresent the analysis. Instead, the paper applies a structured, quantitative literature synthesis: peer-reviewed empirical studies published between 2018 and 2025 that use firm-level ESG controversy scores and standard financial performance measures were identified, and their sample characteristics, methods, and coefficient-level findings were extracted and compared on a common basis. This approach is consistent with how systematic review methods are applied in the finance literature when the underlying construct, here the ESG controversy score, is standardised across studies because it is sourced from the same handful of data providers.

4.2 Typical primary-study design in this literature

Across the studies reviewed, the typical design is a firm-year panel regression of the form:

$$Performance(i,t) = a + b1 ESG_Controversy(i,t-1) + b2 ESG_Score(i,t-1) + b3 (ESG_Controversy \times ESG_Score)$$

$$+ Sum\ of\ ck\ Control_k(i,t) + Industry_FE + Year_FE + Country_FE + e(i,t)$$

Performance is proxied by return on assets, return on equity, or Tobin's Q; the controversy score is lagged by one year to address reverse causality, since poor financial performance can itself trigger controversies; controls typically include firm size (log of total assets), leverage (debt to total assets), sales growth, and capital expenditure intensity; and industry, year, and country fixed effects absorb time-invariant and macro-level differences. Several studies additionally use system GMM estimation (Arellano-Bond) to address dynamic endogeneity, and some apply multilevel or random-coefficient models to separate firm-level from country-level and industry-level variation.

Sample sizes in the reviewed literature range from a few hundred firms observed over five to seven years, up to the Aouadi and Marsat (2018) sample of more than 4,000 firms across 58 countries observed from 2002 to 2011. More recent studies tend to use shorter but more recent windows, commonly 2015 to 2022, reflecting the period in which ESG controversy scoring became more consistently available from data vendors.

4.3 Basis for the present synthesis

Nine peer-reviewed sources published between 2018 and 2025 were reviewed for this paper, spanning international, European, Chinese, and banking-sector samples, and covering profitability, market value, risk, and investment efficiency as outcome variables. Table 1 summarises the sample, period, method, and headline finding of each study.

Table 1. Summary of Reviewed Empirical Studies

Study	Sample	Period	Method	Headline finding
Aouadi & Marsat (2018)	4,000+ firms, 58 countries	2002-2011	Panel regression, sample splits	Controversies linked to higher firm value on average; effect driven by high-attention, large firms
Nirino et al. (2021)	International listed firms	Multi-year panel	Panel regression	Controversies reduce performance; ESG practices do not significantly moderate
Marsat et al. (2022)	233 environmental controversies, international	2010-2016	Event-based resilience analysis	Strong environmental performance increases resilience to controversy shocks
Banking sector study (2021)	567 listed banks, US and Europe	2016-2021	System GMM (Arellano-Bond)	Positive, significant link between ESG governance and controversy score

Corporate control study (2024)	Listed firms, international	Multi-year panel	Panel regression	One SD rise in controversy score linked to about 3.9% higher profitability index
Elamer et al. (2024)	Listed firms, international	Multi-year panel	Panel regression, Tobin's Q	Controversies reduce firm value; governance and ESG practices partially offset the effect
Industry/country cluster study (2024)	International listed firms	Multi-year panel, lagged score	Multilevel random-coefficient model	Effect of controversies on performance varies by industry sensitivity and by emerging vs developed market status
Investment efficiency study (2025)	847 China A-share firms, 3,267 obs.	2007-2022	Panel regression with mediation tests	Controversies reduce investment efficiency via higher agency costs and lower audit quality
Firm value and risk study (2025)	International listed firms	Multi-year panel	Panel regression, fixed effects	Controversies reduce value and raise risk; high ESG score dampens the risk effect

5. Findings

Across the nine studies, six report a net negative relationship between ESG controversy exposure and financial performance or firm value, one reports a positive relationship on a profitability index, one reports a mixed, context-dependent relationship that varies by industry and market development, and one reports a positive association between ESG governance quality and the controversy score itself rather than between controversies and performance directly. On firm risk specifically, the evidence is more consistent: every study that measured a risk-related outcome found that controversies raise risk, and that this effect is at least partly offset by strong underlying ESG performance.

The moderating role of the ESG performance score is the least settled finding. Three studies find that a high ESG score meaningfully reduces the adverse impact of controversies, one finds no significant moderating effect, and the earliest study finds that the interaction between social performance and controversy score is the dominant driver of the value effect, more important than the controversy score on its own. This pattern suggests that the moderating effect of ESG performance may depend on firm visibility, market development, and the time period studied, consistent with the industry and country cluster findings, which show materially different effects in environmentally sensitive industries and in emerging markets compared with the full sample.

On investment efficiency and governance, the evidence points to controversies operating through internal channels, specifically agency costs and audit quality, rather than only through external market reaction. This is

a useful complement to the value and risk findings, because it suggests that the financial cost of a controversy is not limited to a one-off stock price reaction; it can also show up gradually through weaker capital allocation decisions in the years following a controversy.

6. Discussion

Taken together, the synthesis supports a cautious version of H1: the balance of recent evidence favours a negative relationship between ESG controversies and firm value and profitability, but the relationship is not uniform, and the two studies reporting a positive or attention-driven effect indicate that market size, media visibility, and takeover-market discipline can reverse or dampen the expected negative sign. This is consistent with the theoretical picture in Section 2, where stakeholder and legitimacy theory predict a negative effect while the attention-based argument predicts the opposite under specific conditions.

H2 is supported more consistently. Every risk-focused study in the sample finds that controversies raise firm risk, and the moderating role of ESG performance in reducing that risk is the most robust finding across the literature reviewed. This matches the risk-management framing in which a controversy functions as an idiosyncratic shock that a firm's existing ESG practices can partially insure against, even when the same practices do not reliably protect firm value.

H3 receives partial support. The Chinese A-share evidence on investment efficiency is a single-country result and should not be generalised without further testing in other markets, but it identifies a plausible

internal mechanism, agency costs and audit quality, that connects controversies to financial outcomes beyond the stock market reaction that most other studies measure. The governance finding from the banking sample is the outlier in the table: rather than controversies harming governance quality, better ESG governance is associated with a higher recorded controversy score, which the original authors attribute to greater disclosure and monitoring in well-governed firms rather than to governance failure.

An important caveat applies to all of the studies reviewed. The ESG controversy score is constructed from media coverage, so it is influenced by firm size and public visibility as much as by the underlying severity of misconduct. Large, closely followed firms are more likely to have their controversies reported and scored than smaller firms engaged in similar conduct, which is one plausible explanation for why size and attention consistently appear as moderators across the literature.

7. Conclusion, Implications, and Limitations

7.1 Conclusion

The relationship between ESG controversy scores and firm financial performance is directionally negative in the majority of recent peer-reviewed studies, particularly for firm risk, but the size and even the sign of the effect on profitability and market value depend on firm visibility, industry sensitivity, market development, and the interaction with the firm's own ESG performance. The evidence does not support treating the controversy score as a simple, uniformly negative predictor of financial performance; it functions more as a risk amplifier whose financial consequences are shaped by firm-specific and market-specific context.

7.2 Implications

For investors, the findings suggest that the controversy score is most useful as a risk-screening tool rather than a direct valuation input, since its relationship with volatility is more consistent than its relationship with profitability or value. For managers, the investment-efficiency evidence suggests that the internal governance response to a controversy, particularly audit quality and control over agency costs, may matter as much as the external reputational response. For regulators, the variation in findings across emerging and developed markets and across industries indicates that a single global disclosure standard may produce very different financial consequences for firms depending on their operating context.

7.3 Limitations

This paper's central limitation is that it does not present a new primary regression on firm-level data; it synthesises the coefficient-level findings of nine existing studies rather than generating new ones, and readers seeking an original dataset and its own estimation should treat this as a structured review rather than a stand-alone empirical test. The number of studies reviewed, while covering several countries, sectors, and time periods, is not exhaustive of the full literature, and publication bias toward statistically significant results cannot be ruled out.

The reviewed studies also differ in how they define and lag the controversy score, in their control variable sets, and in their estimation methods, which limits the precision of any pooled interpretation of effect sizes.

7.4 Directions for a future primary study

A future study with direct access to LSEG or Bloomberg ESG controversy data could construct a firm-year panel of at least 500 listed firms across multiple sectors from 2018 to 2025, matched with financial statement data from a source such as Compustat, Capital IQ, or Refinitiv Datastream. Following the specification set out in Section 4.2, such a study would regress return on assets, return on equity, and Tobin's Q on the lagged controversy score, the ESG performance score, their interaction, and standard firm-level controls, with industry, year, and country fixed effects, and would apply system GMM estimation to address the dynamic and potentially endogenous relationship between controversies and financial performance identified throughout this review..

REFERENCES

1. Aouadi, A., & Marsat, S. (2018). Do ESG controversies matter for firm value? Evidence from international data. *Journal of Business Ethics*, 151(4), 1027-1047.
2. Elamer, A. A., et al. (2024). ESG controversies and corporate performance: The moderating effect of governance mechanisms and ESG practices. *Corporate Social Responsibility and Environmental Management*. Wiley Online Library.
3. Journal of Financial Reporting and Accounting. (2025). Firm value and risk: how relevant are ESG factors and ESG controversies? Emerald Publishing.
4. MDPI. (2025). ESG controversies and firm investment efficiency: Impact and mechanism examination. *Sustainability*.
5. MDPI. (2025). The impact of ESG controversies on abnormal ESG performance: Evidence from China. *Sustainability*, 17(24), 11212.
6. Nirino, N., Santoro, G., Miglietta, N., & Quaglia, R. (2021). Corporate controversies and company's financial performance: Exploring the moderating role of ESG practices. *Technological Forecasting and Social Change*.
7. ScienceDirect. (2021). Financial performance shortfall, ESG controversies, and ESG performance: Evidence from firms around the world. *Research in International Business and Finance*.
8. ScienceDirect. (2022). ESG controversies and governance: Evidence from the banking industry. *Journal of Financial Stability*.
9. ScienceDirect. (2024). The impact of ESG controversies on the financial performance of firms: An analysis of industry and country clusters.
10. Taylor & Francis. (2024). ESG controversies, corporate governance, and the market for corporate control. *Journal of Sustainable Finance & Investment*