ESG Performance and Market Reactions to Seasoned Equity Offerings

Evidence on a non-linear relationship and its implications for policymakers and finance actors

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Prepared from: Moritz Heiß, Lukas Müller and Marc Ringel (2026), "Evidence on the non-linear relation between ESG and SEO announcement returns", Journal of Economics and Finance.

Executive Summary

This policy brief summarizes new evidence on how stock markets react to environmental, social and governance (ESG) performance when listed firms raise fresh equity capital. The underlying study examines 872 seasoned equity offering (SEO) announcements by 408 U.S. manufacturing firms between 2016 and 2023. Because SEO announcements are typically unexpected and efficiently priced by financial markets, they provide a useful setting for assessing investor responses while reducing reverse-causality concerns that often affect ESG-performance studies.

The core finding is that there is no simple linear “more ESG is always better” relationship. Instead, the study documents an inverted U-shaped association for the overall ESG score and, more clearly, for the social pillar in the post-2020 period. Firms with moderate social scores receive the most favorable short-term market reactions, while both lower and higher scores are associated with lower announcement returns. By contrast, environmental scores are negatively associated with short-term market reactions after 2020. The study finds no link between ESG performance and longer-horizon buy-and-hold abnormal returns or SEO underpricing.

For policymakers and finance actors, the main message is one of caution. Aggregate ESG scores can hide materially different pillar effects; non-linear patterns matter; and evidence from earlier periods may not travel well to today’s market environment. ESG information appears most useful when it is material, credible and interpreted in context rather than treated as a monotonic signal of lower financing risk.

Key messages

- The study finds no simple linear ESG premium in the market reaction to seasoned equity offerings.
- The strongest non-linear pattern is in the social pillar: moderate social scores are associated with the most favorable short-term announcement returns.
- Higher environmental scores are associated with weaker short-term market reactions, especially after 2020.
- No statistically significant relation is found between ESG performance and longer-term buy-and-hold abnormal returns or SEO underpricing.

1. Why this Matters

ESG metrics now shape corporate reporting, investor screens, stewardship strategies and public debates on capital allocation. Yet the relationship between ESG performance and corporate financial outcomes remains unsettled. A major reason is that much of the literature relies either on accounting-based performance measures or on empirical models that assume the effect of ESG is linear. In practice, however, investors may react differently to low, moderate and very high levels of ESG engagement, and they may distinguish between environmental, social and governance dimensions rather than treat ESG as a single block.

The paper summarized here addresses these issues in a particularly relevant setting: the announcement of seasoned equity offerings, or public share issues by firms that are already listed. SEO announcements are important financing events and are typically associated with negative abnormal returns because they can signal overvaluation, information asymmetry or agency problems. For that reason, they offer a demanding test of whether ESG performance changes how investors interpret a firm's decision to raise equity capital.

For EU policymakers and finance audiences, the question is not simply whether ESG is "good" or "bad" for company value. It is whether higher ESG scores are uniformly rewarded, whether different ESG pillars matter in different ways, and whether those patterns have changed as ESG has moved into mainstream finance and become more contested. Those are directly relevant questions for sustainable finance policy, for market analysis, and for the interpretation of ESG disclosures in capital-raising contexts.

2. What the Study Examines

The study analyzes 872 SEO announcements by 408 publicly listed U.S. manufacturing firms over the period 2016 to 2023. ESG data are drawn from LSEG, allowing the authors to examine both the combined ESG score and the three underlying pillars: environmental (E), social (S) and governance (G). The manufacturing sector is chosen for two reasons. First, it accounts for a large share of SEO activity in the broader sample. Second, ESG issues are especially material in manufacturing because production processes are resource- and energy-intensive, environmental externalities are visible, and labor and workplace issues are closely tied to operations.

The main outcome of interest is the cumulative abnormal return (CAR) around the SEO announcement, measured over a short [0,+1] event window. The use of event-study methodology is central to the paper's contribution. It isolates short-term shareholder reactions to a clearly defined corporate event and thereby mitigates the reverse-causality concern that often complicates research on whether firms "do well by doing good" or "do good by doing well." In the sample, the median announcement effect is negative, at about –4.48 percentage points, which is in line with the wider SEO literature.

To test whether the ESG–return relationship is non-linear, the authors estimate models with both linear and squared ESG terms and then apply a three-step procedure to evaluate whether the data support a U-shaped or inverted U-shaped pattern. They also split the sample into two periods, 2016–2019 and 2020–2023, to assess whether the relationship changed after the onset of the COVID-19 period, when both ESG salience and market uncertainty increased. Additional robustness checks include quantile regressions, alternative return specifications, alternative estimation windows, fixed-effects models and placebo tests. Finally, the paper examines whether ESG performance is associated with longer-horizon buy-and-hold abnormal returns (BHARs) and with SEO underpricing.

3. Main Findings

The first set of results comes from linear regressions. Here, total ESG performance, the social pillar and the governance pillar are not consistently related to announcement-window abnormal returns. The only robust linear association is found for the environmental pillar: higher environmental scores are associated with lower short-term market reactions to SEO announcements. Economically, the effect is non-trivial. A one-standard-deviation increase in the environmental score is associated with a decline in announcement-window CARs of roughly 3.05 percentage points.

The more important contribution of the paper, however, lies in the non-linear results. Once squared terms are introduced, the total ESG score and, more clearly, the social pillar display an inverted U-shaped relationship with SEO announcement returns. In the case of the social pillar, the turning point is estimated at approximately 43.5, which lies modestly above the sample mean and median. In practical terms, the result suggests that firms with moderate levels of social performance receive the most favorable short-term market response at the time of equity issuance, while both lower and higher levels of social performance are associated with weaker reactions. The governance pillar remains statistically insignificant, and the environmental pillar does not satisfy the formal conditions for a statistically supported U-shaped or inverted U-shaped relationship.

The timing of the results is equally important. The relevant patterns are not present in the first half of the sample. For 2016–2019, the effects are statistically insignificant. They appear only in 2020–2023. In this later period, the inverted U-shaped relationship for the total ESG score and the social pillar becomes significant, and the negative association of environmental scores with announcement returns becomes more pronounced. The paper's pooled structural-break specification further supports the conclusion that the relationship changes after 2020, especially for the social pillar.

A final set of findings concerns what the study does not find. ESG performance is not statistically related to six- or twelve-month buy-and-hold abnormal returns after the SEO announcement. Nor is ESG performance significantly related to SEO underpricing. This matters because it suggests that the documented pattern concerns immediate market interpretation of financing announcements rather than a broader, consistently observable improvement or deterioration in subsequent stock performance or issue pricing.

4. Interpretation for Policy and Finance Actors

Taken together, the findings challenge a common implicit assumption in ESG debates: that higher ESG performance should be rewarded monotonically by capital markets. In the setting studied here, investors do not appear to reward all ESG improvement equally. Instead, they differentiate across pillars and react most favorably to intermediate levels of social performance. The paper interprets this as consistent with a “too much of a good thing” pattern: moderate ESG engagement may be seen as credible, targeted and value-relevant, while very high levels may raise questions about cost, managerial overreach or symbolic activity. The study does not directly identify the mechanism, so such interpretations remain suggestive rather than definitive. Even so, the results are informative because they indicate that score maximization alone is unlikely to capture how markets process ESG information during equity issuance.

The negative environmental result after 2020 should be read with similar caution. The study cannot show why higher environmental scores are associated with weaker short-term market reactions in the later period. But it argues that the finding is consistent with a market environment in which environmental engagement is subject to greater scrutiny and may be associated with perceived costs, regulatory exposure or uncertainty about future cash flows. This interpretation is also consistent with the paper’s broader discussion of recent evidence showing that environmentally branded corporate actions have not always been rewarded in more recent years.

For EU policymakers and finance audiences, three analytical points stand out. First, composite ESG scores can conceal important heterogeneity across pillars. A combined score may suggest one pattern, while the underlying environmental and social channels point in different directions. Second, non-linearity matters. The relevant empirical question is not only whether ESG has an effect, but whether that effect changes across the score distribution. Third, market context matters. Evidence from pre-2020 data does not explain the more recent period in this study, which means that policy and investment frameworks should be careful about carrying older stylized facts forward without re-testing them.

5. Policy Implications

1. Avoid linear assumptions in the use of ESG metrics. Sustainable-finance frameworks and market analysis should not assume that ever-higher ESG scores automatically translate into more favorable capital-market reactions. Where possible, pillar-specific and non-linear patterns should be examined explicitly rather than inferred from a single composite score.

2. Prioritize materiality and credibility in disclosure around capital raising. The paper’s results suggest that investors distinguish between ESG information that appears operationally relevant and ESG information that may be interpreted as costly or symbolic. For policymakers and market actors, this reinforces the value of disclosures that clearly connect ESG activity to business operations, financing needs and intended use of proceeds.

3. Interpret post-2020 evidence as structurally different from earlier periods. Because the key findings emerge only in 2020–2023, policymakers and finance professionals should be cautious when relying on older empirical evidence to design rules, guidance or valuation assumptions. ESG-finance relationships may be contingent on changing political, regulatory and market conditions.

4. Do not infer broad financing advantages from ESG scores alone. The absence of significant results for longer-horizon BHARs and SEO underpricing means that ESG performance should not be treated as a stand-alone proxy for reduced financing frictions or improved market outcomes. Conventional indicators of profitability, leverage, offer size and firm characteristics remain central.

5. Build the evidence base before generalizing across sectors and jurisdictions. The study is restricted to U.S. manufacturing firms, a sector where environmental and social issues are particularly material. Application to European markets or to less ESG-intensive sectors should therefore be cautious and evidence-led.

6. Limits

The paper is careful about its own limitations, and these should remain central to any policy interpretation. The analysis is observational and cross-sectional around the time of issuance, so it does not establish causal effects of ESG performance on market value. Unobserved firm characteristics may still influence both ESG scores and announcement returns. The study also focuses on one country, one sector and a relatively recent period, which limits external validity. Finally, while the paper discusses mechanisms such as investor scrutiny, signaling concerns, political dynamics and greenwashing risk, it does not measure these channels directly. The findings should therefore be read as a disciplined empirical warning against simplistic assumptions, not as a definitive account of why markets respond as they do.

7. Key References

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