Executive Summary

ESG Risks and the Cross-Section of Stock Returns

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Abstract

This paper finds that environmental, social, and governance (ESG) risks generate negative long-run stock returns. A value-weighted U.S. portfolio with high ESG risks exhibits a four-factor alpha of −3.5% per year, even when controlling for other risk factors, industries, or firm characteristics. The negative alpha stems from unexpected costly ESG issues and from negative earnings surprises. These findings make three contributions. First, weak corporate social responsibility destroys shareholder value. Second, stock markets fail to incorporate the consequences of intangible risks. Third, shorting firms with high ESG risks is a profitable socially responsible investing strategy.

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Executive Summary

Corporate social responsibility (CSR) has gained widespread adoption in practice over the past decades. Many firms engage in corporate actions that are beneficial to the firm's stakeholders, the environment, or the society. This development has raised an important strand of academic research investigating the relationship between CSR and shareholder value. Does CSR create or destroy shareholder value?

This research has resulted in two competing perspectives. According to one view, CSR is simply the result of an agency problem inside the firm. This view puts forward that managers often do not act in the best interests of their shareholders, but rather pursue their own interests. Because of this problem, managers spend money on value-destroying CSR projects, for example, to create the popular image of a socially responsible manager. Proponents of this view include Friedman (1970), who argued in his famous essay that the sole social responsibility of business is to increase profits. Another view, however, claims that CSR does not only further social goals, but also enhance shareholder value. In line of this reasoning, Bénabou and Tirole (2010) explain that "doing well by doing good" holds because CSR strengthens the firm's strategic market position and attracts socially responsible stakeholders who are willing to exchange money for moral value. For example, by treating employees well, managers can increase the motivation of their employees and attract high-skilled employees, which results in positive long-run stock returns (Edmans 2011; Edmans, Li, and Zhang 2016).

Many academic papers have empirically investigated whether doing well by doing good holds. This paper instead focuses on the most controversial firms and asks whether weak CSR destroys shareholder value. It answers this question by investigating the long-run stock returns of public firms with high environmental, social, and governance (ESG) risks. A firm has high ESG risks when it has a notable history of many and severe ESG issues. The data sample of this study contains public firms whose stocks were traded at major stock exchanges in the United States and Europe over the last eight years (between 2009 and 2016).

RepRisk, a Zurich-based company, provides the ESG data. Since January 2007, RepRisk employs a rigorous research process to identify ESG and business conduct risks. Specifically, RepRisk screens many thousand information sources (e. g. print and online media, NGOs, government bodies) on 28 predefined ESG issues, such as environmental pollution, human rights violation, or fraud. This collection of ESG issues is then used to calculate an ESG risk exposure score, the RepRisk Index, for each firm in the sample. In this process, RepRisk distinguishes major from minor ESG incidents, based on the severity, reach, and novelty of an incident. According to RepRisk's documentation, a firm has high ESG risk exposure when its RepRisk Index reached values of larger than 50 over the past two years, indicating that the firm had many and severe ESG issues in the last two years. This paper investigates the long-run stock returns of these firms to find out whether weak CSR destroys shareholder value.

The empirical strategy of this paper is a typical portfolio analysis. Firms with high ESG risks are put into a value-weighted portfolio that is reformed every two years. The returns of this portfolio are then compared against well-known academic risk factors (Fama and French 1993; Carhart 1997). This analysis shows that a U.S. portfolio with high ESG risks is associated with significant negative abnormal stock returns from January 2009 to December 2016, with an estimated alpha of between −3.5% and −3.7% per year. A similar European portfolio exhibits significant abnormal returns of between −2.0% and −2.9% per year. The negative alphas are robust to risk factors, industries, firm characteristics, and various other robustness checks. The paper provides two explanations for the negative alphas. The first is that investors are negatively surprised when firms with high ESG risks have new ESG issues, indicating that investors underestimate the persistence of weak CSR. The second is that firms with high ESG risks have significantly weaker operating performances, more negative earnings surprises, and more negative earnings announcement returns than peers.

By showing that ESG risks entail negative abnormal long-run stock returns, this paper makes three contributions. First, it demonstrates that high ESG risks destroy shareholder value, revealing an important channel through which CSR affects shareholder value. Second, it shows that the stock markets do not fully capitalize the negative consequences of intangible risks. Third, it provides a socially responsible investing (SRI) strategy that is also profitable.

With the first contribution, this paper adds to the debate on whether CSR is beneficial to firm value. This question has serious implications for managers as well as for investors. If the agency view of CSR holds, managers should only serve to their shareholders and not spend money on CSR, and investors should not invest in firms that implemented CSR. However, this paper provides evidence against this view. It shows that "doing well by doing good" holds in the sense that weak CSR results in value-destroying ESG issues over the long-run. By finding a robust negative effect of high ESG risks on long-run stock returns, this paper extends prior studies on the short-term effects of negative CSR news (e. g. Krüger 2015). It also updates earlier studies that find no significant underperformance of firms with weak CSR (e. g. Borgers et al. 2013). These studies find different results because they measure CSR with KLD scores, which have several disadvantages against RepRisk scores. Unlike RepRisk, KLD does not measure weak CSR by systematically searching prior ESG issues, but by investigating a large number of equal-weighted CSR criteria. As these criteria are a mixture of major of minor CSR issues, KLD scores make it difficult to identify firms with high ESG risk exposures.

The negative correlation between ESG risks and long-run stock returns does not only imply that weak CSR destroys shareholder value, but also that markets misprice the consequences of ESG risks. Risks by itself are intangible. This paper thereby extends the literature on mispricing of intangibles. Earlier studies show that markets do not fully incorporate the value of intangible assets (e. g. Chan, Lakonishok, and Sougiannis 2001) These studies explain the mispricing by markets lacking detailed information about the intangibles. Edmans (2011) and Edmans, Li, and Zhang (2016) however find that worldwide markets underestimate the value of employee satisfaction, although this intangible is documented by highly public surveys. The findings of these two papers suggest that the lack-in-information hypothesis of prior studies provides no complete explanation for the mispricing of intangibles. This paper contributes that markets do not only misprice the value of intangible assets, but also the consequences of intangible risks. ESG risks are another example of a mispriced intangible that is highly visible, because ESG risks are measured by past ESG issues that appeared in the news. These results suggest that markets misprice intangibles, even when they do not lack information about the intangible, consistent with Edmans (2011).

Under a mispricing channel, markets are unaware of the true value of an intangible. A mispriced intangible only affects stock prices when the intangible subsequently manifests in tangible outcomes (Edmans 2011). This paper provides evidence that intangible ESG risks manifest in two tangible outcomes that are valued by the markets. The first are new ESG issues. A panel regression shows that firms with high ESG risks have more ESG issues in the next year than firms with low or medium ESG risks. Although investors should expect this, they are surprised when firms with high ESG risks have new ESG issues, as indicated by negative abnormal event returns. This finding reveals that investors underestimate the probability that firms with high ESG risks will have new value-destroying ESG issues. The first channel requires that ESG risks translate into new ESG issues that become public. However, many negative consequences of ESG risks do not become public. For example, reputational losses from past ESG issues may result in less attractive contracts with suppliers, less motivated employees, or critical customers paying lower prices for the firm's products. These consequences will manifest in unexpectedly lower profits over time, if they are not capitalized by the stock markets. The second tangible outcome are therefore negative earnings surprises. Indeed, I find that firms with high ESG risks have significantly weaker operating performances, more negative earnings surprises, and more negative earnings announcement returns than peers. Taken together, both channels explain a large size of the negative alpha of firms with high ESG risks.

The third contribution of this paper relates to the research on the link between SRI and investment performance. Although there is no clear definition on SRI, a socially responsible investor usually only chooses firms that care for their stakeholders as well as for their shareholders. The literature has devoted much attention on the investment performance of SRI strategies, with mixed results. While many studies find a zero (e. g. Bauer, Koedijk, and Otten 2005) or negative (e. g. Hong and Kacperczyk 2009) effect, some studies find evidence that SRI improves investment performance (e. g. Lins, Servaes, and Tamayo 2016). Most of these studies investigate SRI strategies that avoid certain firms and invest in others. This paper contributes a new SRI strategy that is profitable, namely to short U.S. or European firms with a notable history of ESG issues. Thereby, socially responsible investors can not only put pressure on these firms to improve their CSR standards, but also earn positive abnormal stock returns.

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