Executive Summary

The Price of Ignoring ESG Risks

Simon Gloßner*

Catholic University Eichstätt-Ingolstadt

May 18, 2018

The full article is available at:
`http://ssrn.com/abstract=3004689`

Abstract

This paper finds that environmental, social, and governance (ESG) risks generate negative long-run stock returns. A value-weighted U.S. portfolio of controversial firms with a known history of ESG incidents 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 recurrent ESG incidents and from negative earnings surprises. These findings make three contributions. First, stock markets fail to fully incorporate value-relevant ESG information into investment decisions. Second, weak corporate social responsibility destroys shareholder value. Third, excluding controversial firms is a socially responsible investment screen that may improve investment performance.

*Corresponding address: Catholic University Eichstätt-Ingolstadt, Department of Finance and Banking, Auf der Schanz 49, 85049 Ingolstadt, Germany. E-mail: simon.glossner@ku-eichstaett.de.

Executive Summary

An oil refinery operated by BP in Texas City suffered a severe explosion in 2005, killing 15 workers and injuring more than 100 others. One year later, BP's Alaskan oil pipeline leaked because of corrosion, resulting in a 267,000 gallon oil spill. Despite all announcements that safety is the firm's most important goal, BP was fined 87 million U.S. dollars in 2009 for ongoing safety violations at its Texas City refinery. What happened afterwards is well-known: BP's Deepwater Horizon exploded in 2010. The explosion killed 11 workers and the resulting oil spill developed into one of the worst environmental disasters in years.[1]

The case of BP illustrates that environmental, social, and governance (ESG) incidents can result in massive shareholder value losses. Yet, it is extremely difficult to quantify ESG risks[2], given that one needs detailed insights into a firm's business practices to evaluate these risks. This raises the question of whether stock prices reflect the firms' ESG risk exposures.

To shed light on this question, this paper focuses on controversial firms—firms, such as BP, that have a known history of ESG incidents. Controversial firms will be *overvalued* when stock markets do not pay enough attention to ESG. Investors may ignore ESG information because they are too obsessed with short-term financial metrics to incorporate long-term fundamentals (Porter 1992). Or investors may ignore ESG because it has traditionally been argued that making profits is more important than being socially responsible (Friedman 1970). Finally, stock markets may simply underestimate the damage of ESG incidents to the firm's reputational capital, whose value is, as with all intangible assets, difficult to quantify (e. g. Chan, Lakonishok, and Sougiannis 2001; Cohen, Diether, and Malloy 2013).

In contrast, there is also evidence that stock markets care for social norms. Controversial firms will be *undervalued* when norm-constrained institutional investors shun these firms. Hong and Kacperczyk (2009) show that institutional investors neglect stocks from "sin" firms, which are firms that produce tobacco, alcohol, or gambling. Institutional investors may not only shun sin firms, but also controversial firms, which had several ESG incidents, given that ESG has lately gained much attention. In fact, more than 1,700 worldwide investors with about 68 trillion

[1]Cherry and Sneirson (2011) and Shefrin and Cervellati (2011) describe the case of BP in detail.
[2]ESG risks are defined as the risk of incurring value-destroying ESG incidents.

U.S. dollars under management signed the UN Principles For Responsible Investments (PRI) and committed themselves to incorporate ESG information into their investment decisions.

To distinguish between these two hypotheses, this paper investigates the long-run stock returns of controversial firms. I rely on ESG data from RepRisk, a Zurich-based company, to identify these firms. Since January 2007, RepRisk employs a rigorous research process to identify ESG incidents. Specifically, RepRisk screens many thousand information sources (e. g. print and online media, NGOs, government bodies) on 28 predefined ESG incidents, such as environmental pollution, human rights violation, or fraud. This collection of ESG incidents 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 incidents, based on the severity, reach, and novelty of an incident. According to RepRisk's documentation, a firm has a high ESG risk exposure when its RepRisk Index reached values of higher than 50 over the past two years, indicating that the firm had many and/or severe ESG incidents in the past. This paper investigates the long-run stock returns of exactly these firms to find out whether controversial firms are mispriced.

The empirical strategy of this paper is a portfolio analysis. Controversial firms 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 of controversial firms is associated with significant negative abnormal stock returns from January 2009 to December 2016, with a four-factor alpha of between −3.5% and −3.7% per year. A 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 controversial firms have new ESG incidents. The second is that controversial firms have significantly weaker operating performances, more negative earnings surprises, and more negative earnings announcement returns than peers.

By showing that controversial firms entail negative abnormal long-run stock returns, this paper makes three contributions. First, stock markets do not fully incorporate value-relevant

ESG information into the stock prices. Second, high ESG risks destroy shareholder value, revealing an important channel through which corporate social responsibility (CSR) affects shareholder value. Third, excluding controversial firms is a socially responsible investment (SRI) screen that may improve investment performance.

With the first contribution, this paper emphasizes the importance of incorporating ESG information into the investment decision-making process. I provide strong evidence that stock markets underestimate the negative consequences of high ESG risks. Given that stock markets misprice controversial firms, which have a history of ESG incidents, it seems that markets do not pay much attention to ESG information, although they claim otherwise. My paper is closely related to the papers by Edmans (2011) and Edmans, Li, and Zhang (2016) which document that stock markets underestimate the value of employee satisfaction in worldwide markets. While these studies document mispricing for one particular type of *ESG opportunities*, I show that markets also misprice *ESG risks* in general. More broadly, my paper is also related to a large strand of literature investigating whether stock markets misprice intangibles (e. g. Chan, Lakonishok, and Sougiannis 2001). I contribute that stock markets do not only misprice intangibles, but also important business risks such as ESG risks.

Controversial firms are characterized by weak CSR. The second contribution of this paper is therefore to the debate of whether CSR is beneficial to shareholder value. According to the agency view, CSR is simply the result of an agency problem inside the firm. Proponents of this view include Friedman (1970), who argues in his famous essay that the sole social responsibility of business is to increase profits. Another view, however, puts forward that CSR does not only further social goals, but may also enhance shareholder value (Bénabou and Tirole 2010). This paper provides support for the latter view, showing that "doing well by doing good" holds in the sense that weak CSR increases the risk of costly ESG incidents 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's risk exposure scores. Unlike RepRisk, KLD

does not measure weak CSR by systematically searching ESG incidents that appeared in the news, but by investigating a large number of equal-weighted ESG criteria. As these criteria are a mixture of major and minor ESG issues, KLD scores make it difficult to identify firms that pursue value-destroying CSR practices.

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 effect (e. g. Bauer, Koedijk, and Otten 2005) or a negative effect (e. g. Hong and Kacperczyk 2009), some studies find evidence that SRI improves investment performance (e. g. Lins, Servaes, and Tamayo 2016). This paper contributes that excluding controversial firms from a SRI portfolio does not only make the portfolio more socially responsible, but may also improve its investment performance. This exclusion criterion is therefore another example of a SRI screen that may positively impact investment performance. However, excluding controversial firms will improve performance only as long as non-SRI investors continue to ignore ESG information in their investment decisions.

References

Bauer, Rob, Kees Koedijk, and Rogér Otten (2005). "International evidence on ethical mutual fund performance and investment style." *Journal of Banking & Finance* 29 (7), 1751–1767.

Bénabou, Roland and Jean Tirole (2010). "Individual and corporate social responsibility." *Economica* 77 (305), 1–19.

Borgers, Arian, Jeroen Derwall, Kees Koedijk, and Jenke Ter Horst (2013). "Stakeholder relations and stock returns: on errors in investors' expectations and learning." *Journal of Empirical Finance* 22, 159–175.

Carhart, Mark M. (1997). "On persistence in mutual fund performance." *Journal of Finance* 52 (1), 57–82.

Chan, Louis K. C., Josef Lakonishok, and Theodore Sougiannis (2001). "The stock market valuation of research and development expenditures." *Journal of Finance* 56 (6), 2431–2456.

Cherry, Miriam A. and Judd F. Sneirson (2011). "Beyond profit: Rethinking corporate social responsibility and greenwashing after the BP oil disaster." *Tulane Law Review* 85 (4), 983–1038.

Cohen, Lauren, Karl Diether, and Christopher Malloy (2013). "Misvaluing innovation." *Review of Financial Studies* 26 (3), 635–666.

Edmans, Alex (2011). "Does the stock market fully value intangibles? Employee satisfaction and equity prices." *Journal of Financial Economics* 101 (3), 621–640.

Edmans, Alex, Lucius Li, and Chendi Zhang (2016). "Employee satisfaction, labor market flexibility, and stock returns around the world." Working paper.

Fama, Eugene F. and Kenneth R. French (1993). "Common risk factors in the returns on stocks and bonds." *Journal of Financial Economics* 33 (1), 3–56.

Friedman, Milton (1970). "The social responsibility of business is to increase its profits." *New York Times Magazine*. September 13, 1970, 122–126.

Hong, Harrison and Marcin Kacperczyk (2009). "The price of sin: The effects of social norms on markets." *Journal of Financial Economics* 93 (1), 15–36.

Krüger, Philipp (2015). "Corporate goodness and shareholder wealth." *Journal of Financial Economics* 115 (2), 304–329.

Lins, Karl V., Henri Servaes, and Ane Tamayo (2016). "Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis." *Journal of Finance*. Forthcoming.

Porter, Michael Eugene (1992). "Capital choices: Changing the way America invests in industry." Washington D.C.

Shefrin, Hersh and Enrico Maria Cervellati (2011). "BP's failure to debias: Underscoring the importance of behavioral corporate finance." Working paper.