

Tilburg University

Shareholder Engagement on Environmental, Social, and Governance Performance

Barkó, Tamás; Cremers, M.; Renneboog, Luc

Publication date:
2017

Document Version
Early version, also known as pre-print

[Link to publication in Tilburg University Research Portal](#)

Citation for published version (APA):

Barkó, T., Cremers, M., & Renneboog, L. (2017). *Shareholder Engagement on Environmental, Social, and Governance Performance*. (CentER Discussion Paper; Vol. 2017-040). CentER, Center for Economic Research.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

No. 2017-040

**SHAREHOLDER ENGAGEMENT ON ENVIRONMENTAL,
SOCIAL, AND GOVERNANCE PERFORMANCE**

By

Tamas Barko, Martijn Cremers,
Luc Renneboog

21 September 2017

ISSN 0924-7815
ISSN 2213-9532

Shareholder Engagement on Environmental, Social, and Governance Performance

Tamas Barko,¹ Martijn Cremers² and Luc Renneboog³

2017

Abstract

We study investor activism promoting environmental, social and governance (ESG) improvements using a proprietary dataset covering 660 companies globally over 2005-2014. Targets have a higher market share, analyst coverage, stock returns, and liquidity. The engagements lead to significant ESG rating adjustments. Activism is more likely to succeed for companies with a good ex ante ESG track record, and with lower ownership concentration and growth. Successful engagements positively affect sales growth, without changing profitability. Targets outperform matched firms by 2.7% over 6 months post-engagement, while the (ex ante) lowest ESG quartile earns an extra 7.5% over 1 year.

Keywords: investor activism; corporate social responsibility; socially responsible investing (SRI); engagement; environmental, social and governance (ESG).

JEL classification: G15, G23, G32, G34, G39.

¹ Researcher, University of Mannheim. Email: barko@uni-mannheim.de

² Professor of Finance, University of Notre Dame. Email: mcremers@nd.edu

³ Professor of Corporate Finance, Tilburg University. Email: Luc.Renneboog@uvt.nl

We would like thank the data provider for providing us with detailed, proprietary information on their shareholder activism procedures. We are grateful for comments from Fabio Braggion, Peter Cziraki, Frank de Jong, Bart Dierynck, Elroy Dimson, Joost Driessen, Alex Edmans, Caroline Flammer, Julian Franks, William Goetzmann, Marc Goergen, Camille Hebert, Hao Liang, Alberto Manconi, Ernst Maug, Zorka Simon, Oliver Spalt, Michael Ungehauer, Servaes van der Meulen, Cara Vansteenkiste, Chendi Zhang, Yang Zhao, and seminar participants at the HAS Summer Workshop in Economics, University of Mannheim, Cardiff Business School, Ghent University, Tilburg University, and University Paris-Dauphine. An earlier version of this paper was titled “Activism on Corporate Social Responsibility”.

1. Introduction

Increasingly prominent, activist investors such as hedge funds, pension funds, and influential individual shareholders and families set out to reshape corporate policies and strategy (e.g., Becht, Franks, Mayer and Rossi, 2009; Becht, Franks, Grant and Wagner, 2017). In this paper, we focus on activism from a different perspective: given that socially responsible investments (SRI) have become increasingly important, we examine whether investor activism is able to promote corporate social responsibility (CSR) as reflected in environmental, social, and governance (ESG) practices, and whether such activism affects ESG practices, corporate performance and investment results.

In the past two decades, socially responsible investing has grown from a niche segment to become mainstream. The UN Principles for Responsible Investing (2015), which establishes principles of responsible investing and guidelines for companies, reports that a large number of institutions (managing about \$59 trillion) has endorsed these investing principles, thereby declaring that corporate social responsibility is an essential part of their due diligence process and matters for investment decisions. Further, the Global Sustainable Investment Alliance (2015) estimates that over \$21 trillion of professionally managed assets are explicitly allocated in accordance with ESG standards, driven by pension funds but increasingly also by mutual funds, hedge funds, venture capital and real estate funds. A subset of these investors actively engages with the companies in their portfolios, requesting that companies improve their environmental, social, and governance (ESG) practices (see, e.g., Dimson, Karakaş and Li, 2015; Doidge, Dyck, Mahmudi and Virani, 2015).¹

¹ Throughout the paper, we use the terms “engagement” and “activism”, as well as “engager” and “activist”, interchangeably.

In our paper, we study investor activism on corporate social responsibility using a large, detailed, and proprietary dataset on CSR activist engagements by a leading European investment management firm that is managing SRI funds both for its own account and for its clients. To the best of our knowledge, this is the first paper to investigate such ESG engagements in an international context. In particular, this paper addresses the following questions: (i) how does the activist investor choose target companies aiming at improving their ESG practices?; (ii) how are such engagements carried out?; (iii) are such engagements successful in improving the targets' ESG performance?; (iv) what drives success or failure in ESG activism?; and (v) is the activism visible in the targets' operations (e.g., accounting returns, profit margin, sales growth, etc.) and (vi) in terms of investment value creation (i.e., stock returns).

Our panel spans a decade (2005-2014), 660 engaged companies from around the globe, and 847 separate engagements. The engagements in our sample primarily concern social matters (43.3%) and environmental issues (42.3%), while only relatively few concern governance issues (14.4%). As a result, these CSR engagements are quite different from the activities by other activist investors such as hedge funds, that generally focus on financial value through advocating for asset restructuring and governance improvement (e.g. Becht et al., 2017), but do not consider social and environmental practices as independent objectives.

We find that engaged companies typically have a higher market share and are followed by more analysts than their peers. Accordingly, in order to avoid selection bias and to account for unobserved heterogeneity, in subsequent analyses we match the engaged firms to control firms from the same industry that are similar ex-ante in terms of size, market-to-book ratio, ESG rating, and ROA. In the case of environmental and social activism, the most common channel for engagement is either a letter or email

addressed to the top management or the board of directors. In cases that relate to governance, the activist typically participates in shareholder meetings or meets in person with firm representatives (managers or non-executive directors).

In our sample, firms with lower ex-ante ESG ratings are more likely to be engaged by the activist. Our evidence suggests that these engagements reveal information about the ESG practices at the engaged companies, which information is subsequently reflected in commercially-available, independent ESG ratings. On the one hand, targets with ex-ante low ESG ratings see their ratings improve during the activism period. On the other hand, for targets with high ex-ante ESG ratings, the engagement process seems to induce a negative correction during the activism period, suggesting that some of the concerns of the activist investor were not previously incorporated in these ratings and are publicly disclosed due to the activism.

The activist considers the engagement as successful depending on whether or not the target sufficiently adjusts its policy on one of more ex-ante determined ESG dimensions. Most of the engagement files in our sample (59%) are considered successfully closed by the activist, which is more likely for targets with a larger market share, a good ESG track record, and earlier successful engagements. The presence of a large controlling shareholder, high short-term growth and a larger cash reserve are associated with a lower likelihood of success. The activist's request for a material change from the engaged company (which we call a reorganization) reduces the likelihood of a successful outcome, relative to an engagement that, e.g., stimulates the target to be more transparent in its ESG policies.

Examining the changes in operating performance following engagement, we find no relation with accounting performance or any of its components. However, sales growth increases on average substantially following a successful engagement, which could indicate

that the implemented changes appeal to a broader customer clientele. Finally, we find positive buy-and-hold stock returns in the month of the completion of the engagement and over subsequent time windows of 6 and 12 months. After the completion of an engagement, excess stock returns (with four-factor adjustment and relative to a matched sample) are higher after successful outcomes, where the difference between successful and unsuccessful engagements is mainly significant within a period of 6 to 12 months, and disappears subsequently. For example, the excess returns of targeted firms are higher than those of non-targeted peer firms by 2.7% over the 6-month period following the engagement. Results are especially strong for firms with low ex-ante ESG scores. Specifically, targeted firms in the lowest ex-ante ESG quartile outperform their matched peers by 7.5% in the year after the end of the engagement. Our results thus suggest that the activism regarding corporate social responsibility generally improves ESG practices and corporate sales and is profitable to the activist.

The rest of the paper is organized as follows. In Section 2, we summarize the literature on (CSR) activism and CSR performance. We describe the data sample in Section 3 and detail the process of CSR engagement in Section 4. We then study the firm characteristics of engaged firms (in Section 5), successful engagements (in Section 6), and the financial and operating performance following CSR activism (in Sections 7). We conclude and discuss extensions in Section 8.

2. Literature review

This paper links up with several related but confined strands of the literature: shareholder activism in general, SRI fund management and the impact of ESG screening devices, and the impact of unobservable activism (i.e., taking place behind the scenes).

Shareholder activism in general can be loosely partitioned into three categories (Dimson et al., 2015): traditional activism, hedge fund activism, and corporate social responsibility activism. Traditional activism is typically exercised by mutual funds or pension funds and generally concerns topics related to corporate governance or restructuring. Hedge fund activists seek to create financial value by influencing corporate strategy and structure. Activism on CSR aims to improve corporate citizenship, mainly focusing on issues related to environmental and social topics.

Social responsibility and ethical investments have religious roots (e.g., in the 17th century Quaker movement; Renneboog, Ter Horst, and Zhang, 2008a). Still, it was not until the 1960's that socially responsible investing (SRI) gained momentum and the general public's interest. Growing concerns about human rights, pacifism, and environmental issues paved the way of today's SRI. The first modern investment vehicle catering to socially responsible investors was Pax World Fund, a mutual fund founded in 1971. Since then, SRI has been expanding from a niche market strategy to a mainstream investment style. According to SRI reports, total assets under management (AUM) surpassed the \$21 trillion mark globally (Global Sustainable Investment Alliance, 2015), with \$6.20 trillion in the United States (US SIF, 2014) and \$6.72 trillion in Europe (Eurosif, 2014).

Fund managers apply various techniques and screens to form socially responsible portfolios. Bollen (2007), and Renneboog, Ter Horst and Zhang (2008b, 2011) differentiate among distinct types of SRI screens. First, negative screening is the most basic type that avoids investing in firms that sell products such as alcohol, tobacco, weaponry, abortion-related drugs, and pornography. Second, positive screens select companies that meet above average standards in areas such as the protection of the environment, the promotion of human rights, or the sustainability of investments. Third, negative and positive screens

are often combined, yielding the so-called “transversal” (Capelle-Blancard and Monjon, 2014), “sustainable” or “triple bottom line” (“people, planet and profit”) screens. Finally, the fourth generation of SRI funds combines the sustainable investing approach (third generation) with shareholder activism. In this approach, portfolio managers attempt to influence their portfolio companies’ policies through direct engagement with the management/board of directors or through using voting rights at annual shareholder meetings.

The existing literature offers conflicting evidence in terms of the financial returns of activism. English, Smythe and McNeil (2004) argue that the effect of activism is only cursory, finding an effect in the first six months following the announcement of activism and diminishing afterwards. Nelson (2006) concludes that abnormal returns are insignificant for any time window, once confounding effects are controlled for. Greenwood and Schor (2009) report that returns to activism are positive only for the cases where targeted companies are acquired as a result of activism. In a survey paper, Gillan and Starks (2007) find no positive effect of activism in the long run, and no convincing evidence of a causal relation between activism and performance. In contrast, some studies show evidence of beneficial activism. One of the first on institutional investor activism was Smith (1996) who studied the California Public Employees’ Retirement System (CalPERS) that was able to use activism as a way to generate shareholder wealth (the “CalPERS effect”), but had no effect on operating performance. Using information from 13-D filings, Brav, Jiang, Partnoy and Thomas (2008) document that firms targeted by activist hedge funds in the US have abnormal returns of 7% around the announcement of activism, and that there is no reversal in returns in the subsequent year. Bebchuk, Brav and Jiang (2015) find no evidence of reversals in the five-year period subsequent to the

13-D filings, and lasting improvements in operating performance.²

Investor activism is not always conducted publicly: influential and major shareholders (institutional investors, families and individuals, corporations) may be active behind the scenes. In a case study of the Hermes UK Focus Fund, Becht et al. (2009) find evidence that activism through private channels creates significant returns and increases operating performance in periods before the market is aware of what is actually going on behind the scenes. Doidge et al. (2015) confirm, for a sample of Canadian institutional investors, that engaging companies through private channels increases shareholder value.

Another body of literature evaluating the performance of SRI funds (see, e.g., Margolis, Elfenbein and Walsh (2011) and Barko and Renneboog (2016) for comprehensive overviews), which indicates that SRI funds at best perform on par with their market benchmarks or their conventionally managed counterparts. Krueger (2013) shows that stock prices react to the release of CSR news, especially when it is negative. A few papers show that some SRI funds are able to outperform: Gil-Bazo, Ruiz-Verdu and Santos (2010) demonstrate that specialized management SRI firms, that perform active portfolio selection, are able to outperform conventional mutual funds³ and Gibson and Krueger (2017) show that funds' investment strategies based on sustainability are related to the chosen investment horizon and yield positive risk-adjusted returns. The pressure on individual firms to address ESG issues has been highlighted in the US SIF

² However, Cremers, Giambona, Sepe and Wang (2015) find that firms targeted by activist hedge funds have similar stock returns and lower increases in Tobin's Q compared to ex-ante similar firms that were not targeted by activist hedge funds, suggesting that while activist hedge funds may have stock-picking ability, it is less clear whether their activism, on average, causes improvements in firm performance.

³ This is in line with the findings of Cremers and Petajisto (2009), who show that mutual funds' outperformance of their benchmark is positively correlated with the portion of actively managed stocks in their portfolio.

(2014) and Eurosif (2014) reports, which state that about 28% and 40% of institutional investors filed ESG-related requests to their portfolio companies in the US and Europe, respectively. Among these institutions, it is predominantly mutual funds and pension funds that contact companies regarding environmental and social issues (Dyck, Lins, Roth and Wagner, 2015).

Using a proprietary sample of U.S. activist files, Dimson et al. (2015) uncover that successful engagements in social and environmental topics induce positive returns and improvements in operating performance and corporate governance. Hoepner et al. (2016) find that ESG activism reduces left tail firm risk, especially when target firms respond with material actions to the activist's requests. Looking at shareholder proxy proposals, Flammer (2015) documents that proposals that pass only by a small margin, generate significant returns and superior long-term accounting performance. It is not ex-ante clear that specific activist tactics are effective across countries. One reason is that legal rules and corporate orientations toward shareholders or stakeholders (and the resulting regulation regarding ESG issues) as well as the voluntary adoption of CSR policies (e.g., reflecting social preferences or institutional development) differ across countries, inducing varying levels of CSR performance (Liang and Renneboog, 2017).

3. Data

3.1. Engagement data

We have obtained a proprietary database on investor activism from a large European asset manager with more than \$250 billion in total net assets under management. The activist has offices and manages funds across Europe, North America and Asia, and has long had a focus on ESG-specific investments. The activist mainly manages mutual funds and pension funds, has a specialized team of analysts that combines

both in-house and independent third-party research to identify companies that have room for improvement in their ESG policies. Our database covers the universe of their completed engagement cases over the period starting in the third quarter of 2005 through the end of 2014. This enables us to test differences in engagement techniques and corresponding outcomes. As Liang and Renneboog (2017) show, there is an important difference in the perception and implementation of CSR across countries with different legal, political and historical origins, such that the findings for one region do not necessarily apply to another. Therefore, we split the sample into three distinct regions based on the corporate domiciles: North America, Europe, and Other (mostly Asia-Pacific) companies. Engaged companies are all either part of the MSCI All-Cap World Index or a major regional or country index. In total, our database has 847 completed engagement sequences involving 660 different companies.

The asset manager employs a specialized ESG-team that screens companies around the world. An activist case starts with the identification of a concern where the target company can improve upon its ESG practices. The engagement team relies on its own research, as well as reports published by specialized research companies and institutes (e.g., the environmental report of the World Bank or the UN Global Compact Monitor). An engagement case can also be triggered by some unforeseen event or crisis, where the engager screens a firm's ESG policies and concludes that they are insufficient to deal with the crisis and hence requests changes to address it. A prominent example is the 2010 Deepwater Horizon oil spill in the Gulf of Mexico, which BP arguably could have avoided or mitigated if they had had clearly formulated environmental and disaster contingency plans in place (Watkins, 2010), and that has triggered policy adjustments in the energy sector and enhanced scrutiny by the providers of CSR performance scores and activists.

At the initiation of an engagement, the activist formulates a clearly defined

objective. We first partition the engagement cases into two groups based on the engagement's objectives, distinguishing those aimed at (i) changing the operations of the firm, e.g. implementing new environmental technology for better water management, or board-restructuring ("reorganization"-oriented engagements), versus at (ii) providing more information on specific ESG dimensions, e.g. these typically involve requests for better reporting standards, such as the publication of a detailed sustainability report ("transparency"-oriented engagements). Each of these engagement categories can be further partitioned according to which of the E, S, and G dimensions was the main dimension of interest.

At the start of an engagement, the activist also decides whether to carry out the engagement alone or in a coalition with one or more other activists, and whom to contact at the company. Typical contact persons in the engaged firm include executive and non-executive management (such as the CEO, investor relations personnel, and ESG representatives). The activist in this study has a self-imposed deadline of three years to achieve the desired outcome. If a successful outcome is reached, it usually occurs within 20 months.

The ESG-team gives advice to its own in-house fund managers (of both SRI and conventional funds) but also works on commissioned cases on behalf of consulting clients' portfolios (as the asset manager also manages external investment funds). The activist typically does not own a major block surpassing the 5% reporting threshold, such that the activist is generally not required to file 13-D reports in the US.

In an environmentally-related example, the engager contacted a large French cosmetics and beauty company regarding their use of palm oil, after a major UK retailer announced a ban on palm oil products coming from unsustainable sources. The engager was concerned that this ban and the skeptical attitude towards the use palm oil would

affect the competitive position of the company in its industry, and requested clarification regarding the use of palm oil in its products. The company provided the requested information, demonstrating that it was only a minor user of palm oil and that it was purchasing its supplies from sustainably managed sources. The activist asked the company to provide this information on its website. After the company complied and published a detailed sustainability report with a special focus on environmental reporting (demonstrating that its potential liability in relation to palm-olive concerns was very limited), this transparency case was successfully closed. This example shows two elements typical for the engagement cases in our sample: first, there is always a trigger for engagements that can be either a significant event, the surfacing of new information, or changes in the regulatory or competitive environment. Second, the engager formulates a specific request and the engagement team follows through with that request and makes sure that all requirements are fulfilled by the engaged company before the file can be successfully closed. In Appendix A, we provide some more illustrations for each main ESG dimension.

For each engagement sequence, we verify that the “successful” closure of the engagement case is indeed determined by the ESG criteria set initially by the activist. Furthermore, we cross-reference outcomes with Factiva records and company websites to check the validity of registered outcomes. We find no evidence that the data include erroneous reporting.

3.2. Company-level data

We obtain our firm-level data from a variety of sources: accounting and stock return data are from Datastream, ESG performance indicators from Asset4 (available

through Datastream), analyst coverage data from I/B/E/S, and ownership data from Morningstar and Orbis. We merge the data from different sources using ISINs, Datastream Codes, and I/B/E/S identifiers, and cross-check, by means of company names, that all available data are properly matched. We use the international industry return data from Kenneth French’s website to calculate abnormal returns. We define industries in various ways, following the classification on French’s website for 10, 17 and 49 major industry groups, depending on the availability of a suitable control firm (see below). All variable definitions and their respective sources are provided in Appendix C.

4. Engagement characteristics

The engagement cases are categorized into three themes based on the underlying goal, environmental, social, or governance. Within each theme, the engager distinguishes among a variety of topics and subtopics,⁴ of which we show the frequency of occurrence in Panel A of Table 1. This panel also exhibits the percentage of successfully closed engagement files, the number of contacts between engager and target firm, the length of engagement sequence, and the main contact type. The table shows that the engager focuses mostly on environmental and social topics, making up 42.3% and 43.3% of the 847 cases, respectively. About 60 percent of the cases are closed successfully⁵, varying by topic: firms are most responsive to engagements regarding public health issues, labor standards, climate change, reporting standards, and corporate governance issues. The average number of contacts with targeted firms and the average length of the engagement process

⁴ A more detailed overview for the subthemes is presented in Appendix B. In order to keep things tractable and to avoid working with very small subsamples, in the multivariate analysis we will focus on the three main ESG topics (for which we also distinguish between reorganization and transparency cases).

⁵ A success rate of 60% is higher than the one reported in Dimson et al. (2015); our sample covers a different time period. A high success rate in activist cases is not unprecedented as, for example, Klein and Zur (2009) report a success rate of 60% and 65% for hedge fund and private equity activists, respectively.

are, respectively, higher and lower for successful cases than for unsuccessful ones. The most frequently used means of contact is a formal letter or email; in case of public health issues, the engager and the firm often meet and, in case of corporate governance engagements, the activist takes the issue to the annual or extraordinary shareholder meeting about half the time.

In Panel B, we further break down the engagements by ESG theme by distinguishing between: (i) the aim of the engagement – triggering reorganization (board or asset restructuring, or operational changes), versus enhancing transparency (see section 3.1), and (ii) whether the engaged firm is initially open to the activist’s demand (in this case, “receptiveness” equals one) versus whether the firm initially resists the demand (in which case “receptiveness” equals zero). Initial receptiveness of the activist’s demands by management does not necessarily imply success at the end of the engagement period; this variable just measures the willingness of companies to start a conversation with the activist.

Overall, about 51.5% of engagements aim at inducing a material change in company policy (reorganization), and two thirds of the engaged companies are initially receptive to the engager’s request and participate in an initial discussion (Panel B). When we study the percentage of successful cases over time (by year of engagement initiation), we observe that success rates by year vary between 61% and 78% (with exception of 2009 when the highest number of cases were initiated and the subsequent success dropped to 33%, for which the financial crisis may be responsible).⁶

We also examine the frequency of the various forms of communication between engager and target. Out of the nearly 3,000 activities recorded in the case files, public channels (such as annual or extraordinary general meetings and press releases) account

⁶ Table available upon request.

for only 170 (or 5.6%) of the instances, and these are mainly corporate governance cases. One third of the contacts occurred via email, 18.5% by means of a letter, 11.4% via a conference call, and in 10.9% of the cases, a personal meeting took place (in 2.8% of the cases at the firm’s premises, and in 8.1% of the cases firm representatives came to one of the engager’s offices).⁷ Over the whole sample period, the number of contacts between targets and the engager across all activist cases has stayed steady. Out of the 17 Fama-French industries, oil and petroleum firms, as well as financials are engaged the most (93 and 86 cases, respectively), followed by pharmaceuticals, utilities, and retail companies. In terms of geographical focus, 54% of the targets are from Europe, 24% from North-America, 16% from the Asia-Pacific region, and the remainder from Latin-America or Africa.

–Insert Table 1 about here–

5. Engaging target firms

5.1. Matching methodology

To examine the determinants of the activist’s decision, we first consider the characteristics of target companies in the year preceding the engagement relative to a matched sample, in order to mitigate the possibility that any observed ESG changes would have happened without the engagements. Our matching pool is the entire universe of companies included in the Thomson Reuters Asset4 ESG database, which contains firms that are included in major indices such as MSCI World, MSCI Europe, DJ Stoxx600, NASDAQ100, Russell 1000, FTSE250, and ASX 300, and which comprises more than

⁷ Table available upon request.

4,200 stocks. The Asset4 ESG database has several advantages. First, it is an international index with broad coverage of large international companies, and contains virtually all our sample firms. Second, this database provides dynamic ESG performance scores that are given by a rating agency that is independent from the engager, and that thus allows us to examine whether the engagements lead to ESG changes that are captured by outsiders. Third, Thomson Reuters is a for-profit organization that is paid by the (SRI) investors for access to its ESG ratings rather than by the rated companies, which implies that rating shopping is unlikely to be an issue (as opposed to, for example, credit ratings where issuers pay for the ratings, see Benmelech and Dlugosz, 2009).

To construct the matched sample, we take several steps. First, we exclude all engaged companies that are also part of the Asset4 database. Second, we restrict the pool to industries based on the 49 Fama-French industry group classification. Third, we calculate the Mahalanobis distance score for each possible engaged and matching company combination based on size, market-to-book ratio, ESG score, and ROA in the year prior to the engagement. The advantage of this matching method is that we do not impose a hierarchy on the matching variables by sequentially sorting companies into portfolios. Furthermore, the Mahalanobis distance score is not sensitive to the scaling of the data and performs well with a small number of matching covariates (Stuart, 2010). The outcome of the matching procedure, the Mahalanobis score, is an intuitive measure that takes the covariance of matching variables into account (and that reduces to the Euclidean distance if the covariances are equal to zero). We cannot find a match based on 49 industries for 14 engaged firms, for which we relax the set of possible matches based on 17 (rather than 49) industries. After calculating the score for each company in our universe, we pick the three companies with the lowest distance metric from the engaged company as the controls. For companies that have multiple engagement cases, we keep the same set of matching companies for subsequent engagements. As a robustness test,

we re-estimate all our multivariate analyses with (i) a single best match, and (ii) other matching methods based on propensity scores (Leuven and Sianesi, 2003), but do not report these results as they lead to similar conclusions.

5.2. Univariate results

We present summary statistics for target and matching firm characteristics in Table 2, testing the difference in means and medians between the engaged and matching sample using a paired t-test and a Wilcoxon signed-rank test, respectively. To test the difference between the means of the engaged and the control sample, we create a “pseudo-company” for each engaged company using the equally-weighted mean of three matched companies, as in Brav et al. (2008) or Dimson et al. (2015). The pseudo-company characteristic is calculated as

$$\tilde{X}_i = \frac{1}{3} \sum_{j=1}^3 X_{j,i}, \tag{1}$$

where \tilde{X}_i represents a characteristic variable for a pseudo-company for each engaged company i and $X_{j,i}$ is the characteristic variable for each matched company $j = 1, \dots, 3$. All variables definitions and their respective sources are provided in Appendix C.

–Insert Table 2 about here–

ESG performance. As explained above, we use ratings provided by Thomson Reuters Asset4 that capture the ESG attributes of target and matching companies. The “aggregate” ESG rating is the equally-weighted average of the following four underlying sub-ratings or pillars: environmental, social, governance, and economic outlook issues. The first three refer to the usual topics of ESG, while the economic pillar addresses the

financial performance and economic outlook. We document in Table 2 that, both at the aggregate ESG level and the individual pillar level, engaged companies have significantly higher ESG scores than non-engaged firms. This observation is similar to Dimson et al. (2015), who also find that engaged companies already have a higher standards of corporate governance in place prior to investor activism. We also use a modified version of the Entrenchment index (E-index) of Bebchuk et al. (2009); out of their six proposed governance provisions, we include poison pills, golden parachutes, staggered boards, and supermajority for bylaws and mergers, as Asset4 only records these variables for all companies. We find, that on average, engaged firms do not have a different aggregate level of these governance provisions than non-engaged firms.

Risk and performance. The annual stock returns of engaged companies are not statistically different from the matched, non-engaged firms, while the engaged firms exhibit lower stock return volatility and greater liquidity. They also have somewhat higher accounting returns, sales growth, Tobin's Q, and interest coverage. Economically, however, these differences are modest. Engaged companies have somewhat higher market share in their respective industries. Other variables (profit margin, sales growth, asset turnover) do not differ.

Cash and expenses. Free cash flow and cash holding figures are comparable across the two samples (Table 2). Engaged companies have slightly lower capital expenditures as a fraction of total assets (0.4%), spend more on advertising, and pay out more in the form of dividends both in absolute terms and as a percentage of their net income. Cash holdings, free cash flows, and operating expenses do not differ from those of matched firms.

Size and capital structure. Engaged companies are significantly larger, in terms of assets, sales and market value of equity, although they have significantly fewer tangible

assets. Their book leverage is similar to that of their matched peers.

Ownership. Table 2 also reveals that the average holding of our activist engager is small but still significantly higher in engaged firms than in its matched counterparts. Engaged companies have fewer blockholders (owning a stake of 5% or larger), but when considering the different types of owners (e.g. financial institutions, industrial companies, the government, hedge funds and private equity, individuals and families), we find no meaningful differences. The number of blockholders might seem large (Edmans and Holderness, 2017), however, this is driven by firms outside of North America. When we partition the sample into North American, European and other domiciled firms, we see that North American firms, on average, have 3 blockholders, European firms have 4, and other, mainly Asian, companies have more than 4. The majority of engaged firms are independent companies, with no shareholder controlling 25% or more of the shares through direct or indirect holdings.

5.3. Multivariate results

In Table 3, we show the results of probit regressions estimating the likelihood of being engaged by the activist. We first analyze whether firm size, performance, market share, leverage, stock liquidity, cash holdings, dividend yield, capital expenditure, and analyst coverage is related to the choice of the targets, while controlling for year, industry, and geographic fixed effects. The marginal effects exhibited in column (1) of Table 2 indicate that our matching procedure was effective, as none of the above variables help predict which firms are targeted, with the exception of a smaller size, a higher stock market performance, higher product market share, and more analyst coverage. The results also show that the asset manager does not generally target companies multiple times, which suggests that engagements are evaluated and started on a per-case basis and that the activist does not have “favorite” targets.

Second, in column 2 we add the percentage of shares owned by the activist prior to the engagement, whether the firm is independent (does not have a major blockholder controlling at least 25% of the equity), the corporate governance index, and the aggregate ESG score. For the sample of all engagement cases, we find that firms with lower ESG scores are more likely to be targeted. Economically, the marginal likelihood of -0.103 (z-statistic of -1.79) implies that a standard deviation decrease in the ESG score (of 23.8) is associated with an increase in the likelihood to be targeted of 2.45%, which is a 10% increase over the unconditional probability. This shows that the activist tends to target companies with more room for improvement in their ESG practice. Ex-ante, it seems reasonable to expect greater scope for ESG improvements at firms with low ESG scores.

In the subsequent columns of Table 3, we separately estimate the likelihood to be engaged in the environmental (columns 3-4), social (columns 5-6) and governance (columns 7-8) areas. We find that the results from columns 1-2 largely hold, although, in case of the governance dimension, companies that have lower potential growth opportunities but are profitable (in terms of share price performance) and in which the engager has a higher ex ante equity holding are significantly more likely to be contacted by the activist.⁸ Overall, the results indicate that the activist chooses targets that are visible firms with large market shares and in which the activist holds a larger share stake. The tests on the whole sample indicate that the activist does concentrate on firms in the poorest ESG performance category.⁹

⁸ As a robustness test, we repeat the analysis in the first panels of Table 3 for varying levels of engagement whereby the ordering refers to differences in the effort level in engagement. Specifically, we estimate ordered probit models, where the dependent variable is one for engagements triggered for reasons of transparency (“light engagements”), two for reorganization reasons (“strong engagements”), and zero in case of no engagement. In unreported results, we find that previous findings are robust to ordering and, for the strong engagements, the coefficients are larger (in absolute terms).

⁹ We repeat the analysis of Table 3 with geographical segmentation between North American, European

–Insert Table 3 about here–

6. Engagement success

In this section, we consider the drivers of “successful” engagements. As we noted above, success is not determined by the realization of value that could be triggered by the adoption of the activist’s requirements nor does it depend on whether the activist demands can be met with little or much effort, but only depends on whether the target complies with whatever the activist set as the ex-ante demand. Table 4 explores possible drivers of successful engagements, which include (in addition to the variables in Table 3) indicator variables for whether or not the activist requests a reorganization effort rather than just more transparency (captured by the variable “*Reorganization*”), whether or not the engagement was conducted jointly with other activists (captured by the variable “*Joint targeting*”), whether top executives in the target were contacted by the activist versus lower-level managers or non-executive directors (captured by the variable “*Contacted executives*”), the number of contacts over the course of engagements (captured by the variable “*Number of contacts*”) and finally whether any previous engagement was successfully concluded (captured by the variable “*Success streak*”).¹⁰

The results in column 1 reveal that, on average, cases where the activist requests the target to make significant changes in terms of board or asset restructuring or a change in ESG-related operations is significantly less likely to lead to a successful closure of the case by the activist. For example, the coefficient of “*Reorganization*” equals -0.170, which

and other domiciled companies. The analysis is presented in Appendix D, Table D1. We find that the results are qualitatively similar.

¹⁰ We repeat the analysis of Table 4 with geographical segmentation between North American, European and other domiciled companies. The analysis is presented in Appendix D, Table D2.

suggests that such far-reaching requests have a 17% lower likelihood to be successfully closed, compared to an overall success rate of 60%. This is not surprising, as the required effort level in reorganization engagements is much higher for the firm than in the cases where there is only a demand for more transparency and information provision. In general, it is easier to achieve “success” in transparency cases but it is questionable whether these cases are likely to generate significant value that is subsequently reflected in the stock price or the accounting performance. In contrast, reorganization cases may be more likely to lead to value enhancement but may also be harder to achieve as they require more substantial or far-reaching corporate decisions, which the management may be more reluctant to make.

Returning to column 1 of Table 4, we find that eventual success of the engagement is not higher if the activist jointly targets a company with other activists, if executives rather than non-executives are the main contact at the target, when the number of contacts between the activist and the firm is higher, or when a firm is more visible (a larger number of analysts following the firm). Companies that previously implemented changes requested by the activists are more likely to do so again. Targets are also more likely to meet the activist’s request when their sales growth is lower. In particular, the coefficient on “*Sales Growth*” of -0.244 indicates that a standard deviation decrease in sales growth (of 0.290) is associated with an increase in the likelihood of success of 7.1%.

Next, column 2 examines additional variables capturing governance and ESG aspects. We find no persistent relation between engagement success and the proportion of the shares owned by the activist and the increases in this equity stake (Holding increase) during the engagement process, and the target’s corporate governance (as proxied by the aggregate index of shareholder rights provisions – the entrenchment index). However, firms with a higher ESG score prior to engagement are more likely to comply

with the requests of the activists. The marginal likelihood of 0.448 means that a standard deviation increase in ESG ratings is associated with a 10.7% increase in the probability of success. This is consistent with the ex-ante ESG score indicating how much firms care about ESG issues, or that firms with a stronger ESG track record have the necessary ESG resources and know-how largely in place already, such that compliance does not require a large departure from existing practices.

As it is possible that the activist is more likely to select firms to target where the activist anticipates that a successful engagement is more easily achieved, we estimate as a robustness analysis a two-stage Heckman model to control for potential selection issues with a selection equation model (2) of Panel A of Table 3. We find that the above results exhibited in Table 4 carry through, and that selection does not appear to be an issue (as the inverse Mills ratio is insignificant in all our specifications).

When we analyze the outcome of engagement by ESG theme in columns 3-8, we find that reorganization requests are less likely to be successful and that previous successful engagements only matter for the subset of engagements related to environmental issues, but not for social or governance engagements. For environmental engagements, large cash holdings are associated with a reduced probability that the case is closed successfully, perhaps because large cash holdings occur at corporations that are less dependent on external capital markets and that accordingly are less interested in good investor relationships. For the subset of social engagements, those at firms with a larger market share are more likely to be successful, which suggests that market-leaders in their industry are more open to investor engagement or are more worried about potential negative media stories. The sensitivity to the engagement is also larger for firms who seem under pressure because of lower sales growth. Finally, governance engagements are more likely to be successful at firms with low buy-and-hold returns over the past year, which

is strongly statistically significant once we control for the entrenchment index and the ESG rating in column (8). However, lower stock market performance is not related to a higher likelihood of success for environmental or social engagements. This suggests that corporations deem investor concerns more relevant when they have performed relatively poorly in the stock market, but primarily when faced with governance activism, perhaps to forestall more significant shareholder activism.

–Insert Table 4 about here–

7. Analysis of performance after engagement

There are several ways through which implementing or increasing CSR can increase firm value. Pro-social behavior can be rewarding for various stakeholders, shareholders, as well as the management (Baron, 2008; Bénabou and Tirole, 2006): first, higher ESG standards can increase consumer loyalty through product quality signaling, and consequently lead to higher market share, as well as higher and less volatile profits (Albuquerque et al., 2017). Second, employee satisfaction fosters productivity and efficiency, also leading to higher profits (Edmans, 2011; 2012). Third, corporate social responsibility can attract a specific shareholder base with long-term investment goals, thereby reducing pressure on management to generate short-term profits and allowing them to undertake investments that yield returns over a longer time horizon (Gaspar, Massa, Matos, Patgiri and Rehman, 2013). Fourth, improved governance standards also indicate better management practices and result in higher future performance (Ferrell, Liang, and Renneboog, 2016). Finally, investments in CSR could be similar to paying an insurance premium to avoid rare events that could harm a firm and which are not priced yet (Hong and Liskovich, 2016; Lins, Servaes and Tamayo, 2017).

We first test the impact of engagements on the operations and characteristics of target firms. We estimate differences-in-differences (DD) specifications (equations (2) and (3)) whereby the dependent variables are market-based measures of performance (Tobin’s Q), accounting-based measures (ROA, operating expenses, sales growth, profit margin, asset turnover), sales market share, investments (CapEx), ownership (long-term holdings, toehold stake of the activist), ESG performance (ESG ratings; environmental, social, governance scores), corporate governance (entrenchment index), and visibility (analysts following), for two treatments, the successful completion of the engagement case (equation (2)) and the engagement treatment irrespective of subsequent success (equation (3)):

$$y_{t,i} = \alpha + \beta post_t + \gamma success_i + \delta post_t \times success_i + \nu controls_{t,i} + \varepsilon_{t,i}, \quad (2)$$

$$y_{t,i} = \alpha + \beta post_t + \gamma engaged_i + \delta post_t \times engaged_i + \nu controls_{t,i} + \varepsilon_{t,i}, \quad (3)$$

where *Post* is an indicator variable that equals 1 for the 1-year period following the successful closure of a case, and zero otherwise (eq. (2)), or for the 2-year period after the engagement and 0 otherwise (eq. (3)). The latter case captures the typical period that the engagements last. Equation (2) is estimated for the sample comprising engaged companies (both successful and unsuccessful ones), whereas Equation (3) is estimated on the sample comprising both engaged companies and non-engaged matched firms.

We apply the same methodology on various subsamples: the reorganization-oriented engagements, the quartiles of firms with the lowest and highest ESG scores (measured prior to engagement), and the environmental-, social-, and governance-oriented cases. In all these specifications, the vector *Controls* includes leverage, size, tangibility of assets, and time and industry fixed effects.¹¹ We cluster standard errors at the firm level.

For the sake of brevity, we only report the δ coefficients in Table 5, where each

¹¹ In the analysis of Tobin’s Q, we also include ROA, CapEx and sales growth.

coefficient comes from a separate regression. In Panel A, we report the δ coefficients for the evaluation of success for all engagement cases (column 1) and for six subsamples. The results indicate that, on average, accounting performance does not significantly change following a successful engagement. This is in line with Klein and Zur's (2011) results that hedge fund activism does not improve accounting performance.

Sales growth, in contrast, improves on average after successful engagements by 3-22% across virtually all subsamples (with the only exception the subsample of social engagements). Given the typical sales growth of 10.1% in the year preceding engagement, the overall jump of 7.6% is not only statistically, but also economically quite meaningful.

The coefficients on the ESG performance ratings confirm that successful engagements lead to higher ESG scores for targets with the ex-ante weakest ESG ratings (the lowest quartile). The results suggest that if a case is closed successfully with an ex-ante poorly rated company, the ESG rating on average increases by 10.6, which is a significant boost of 13.7% compared to the mean. This growth is most pronounced for environmental ratings, where we observe an 18.6% gain relative to the initial rating.

It is possible that the mere fact that an activist targets a firm generates an effect even if the activist does not attain its specific goal over the course of engagement. To investigate this issue, we turn to panel B of Table 5, where we also report the DD coefficients of an analysis where the treatment effect is engagement (and the non-treated sample consists of matched non-engaged firms). As before, we also study the changes in corporate and ESG performance as well as some other firm characteristics for the full sample and a set of subsamples. We find that the engagement in itself has little impact on the ex-post accounting performance (column 1) or any other firm characteristic (with exception of the market share, which is a little lower). For example, the increases in sales growth that we document for successful cases is not occurring for unsuccessful cases.

The subsamples of firms within the lowest versus highest (ex-ante) ESG quartiles yield some interesting results: the mere fact of engaging poor ESG targets triggers significant increases in their ESG scores (the overall and the sub-scores on E, S, and G aspects all augment as well as the economic outlook sub-score which proxies for shareholder and customer loyalty). So, the mere engagement, independent of the ultimate success of the engagement case, triggers changes in the ESG profile of the target, which is picked up by the independent ESG evaluation providers. For the firms in the highest ex-ante ESG quartile, we observe the inverse: here, all the ESG scores go down after the engagement. This could be the result of an information revelation process: the activist conducts research to identify companies with a potential for improvement in one of the ESG dimensions. If the activist correctly identifies those companies, then subsequent ESG ratings should reflect this new information and the adjusted ESG scores then incorporate the potential ESG problem which drives the scores down. This implies that research and engagement activity brings new information to market actors and better reveals the ESG practices of companies. Previously low-rated companies are not “lost cases” and late best-performers might still have room for improvement. As the activist engages companies, the rating agency generally seems to realize over the course of that engagement that previous scores did not incorporate all of the activist’s concerns, i.e., that engaged companies still had key ESG points to improve on.¹²

–Insert Table 5 about here–

¹² In unreported results, we define the pre- and post-periods of Equations 2 and 3 in various ways. Specifically, we move the cutoff 1-3 years after the start of engagements, and 1-3 years after completion. The results are qualitatively similar to the ones presented here.

8. Returns to engagement

In this section, we measure buy-and-hold returns (BHRs, which are raw, unadjusted cumulative returns) and cumulative abnormal returns (CARs, corrected for exposure to the global market, size, book-to-market and momentum Fama-French-Carhart return factors) of the target’s stock during and after the engagement. We use stock return data from Datastream and download our factor data from the website of Kenneth French.

In Table 6, we report BHRs for various event windows, i.e., in the month around the completion of the engagement (distinguishing between successful versus unsuccessful completion), and over time windows of 6 and 12 months following the end of the engagement. We find that, on average, BHRs are small but positive and statistically significant in the month following the closure of a case (at 0.8%). These positive returns stem from the successfully closed cases that generated BHRs of 1.2%, while cases where the target firm does not comply do not generate any significant return. Over the period of six months after the completion, successful cases generate returns of 4.3%, whereas unsuccessful ones incur stock price decreases by 3.1%. Over a one-year time period, we still find significant return differences between the successful and non-successful cases.

We re-estimate these BHRs over the same time windows for different subsamples and also report them in Table 6. The target subsamples based on the ex-ante ESG scores – the highest or lowest quartiles – do not yield any significant post-engagement financial returns, a finding that does not depend on the engagements being (un)successful.

Successful reorganizations yield BHRs of 2.3% in the month of the completion of the engagement and over a longer time window of 6 months; the BHRs of unsuccessful reorganization attempts are negative by 3.5%. When we partition the engagement files by

ESG dimension, we also find significant differences: over the short run of one month, successful engagements of the environmental and governance type trigger statistically significant BHRs of 1.8% and 2.9%, respectively, although only the former are different from unsuccessful cases. Over the time window of 6 months after the end of the engagement, successful environmental, social, and governance engagements outperform their unsuccessful counterparts by 10.1%, 4.0%, and 1.6%, respectively. Turning to BHRs over one year, governance engagements yield a return of 8.4% on average (but there is no statistical difference between successful and unsuccessful ones), and successful social engagements are 8.3% higher than the unsuccessful cases (5.8% minus -2.5%).¹³

In Figure 1, we depict the mean BHR of equally-weighted portfolios of engaged companies, where the portfolios were created one month prior to the event month and the returns are calculated over the subsequent 18 months. The return difference between successful and unsuccessful cases is highest for the period 6 to 12 months following the completion. Figures depicting the mean BHR over 18 months after the completion of the engagement for the subsamples of engaged North-American, European, and Other (mainly Asia-Pacific) firms, respectively, exhibit a similar picture (not shown)¹⁴. For North-American and European firms, the BHRs gradually increase and level off after about 8-9 months, and the difference in BHRs between (un)successful engagement firms is at the maximum between 6 and 12 months. For the Other subsample, the average BHR across all firms gradually declines over 5 months, but the returns of the unsuccessful cases decline faster than the successful ones.

¹³ We repeat the analysis of Table 6, for the subsamples of North-American, European, and Other cases. The results are largely in line with the ones reported for the overall sample (although some subsamples partitioned based on geographic and (un)successfulness become small). The results are available upon request.

¹⁴ The analysis on subsamples based on regions is not shown for reasons of conciseness but is available upon request.

–Insert Table 6 and Figure 1 about here–

We calculate cumulative abnormal returns (CARs) for the three different time windows following the completion of engagements (as in Table 6) using the four-factor global Fama-French-Carhart model. We do so for all engaged firms and for the subsamples with successful and unsuccessful ones, and by subtracting the CARs from those of their matched firms, we obtain excess CARs (ECARs) that we report in Table 7.¹⁵ The top panel shows that the average ECARs are positive, close to zero (0.5%) but still significantly different from zero in the month after the completion of the engagement (be it successful or unsuccessful). This means that the engaged firms slightly outperform the non-engaged ones. This difference increases to 2.7% in the 6-month period after the engagement file is closed (but there is no difference between successful or unsuccessful completion of the cases). The firms of which the activist demands a reorganization outperform the matched firms by 4.4% in the six months after the closure of the activist’s case (but the difference between successfully or unsuccessfully closed files is not statistically significant).

Turning to the firms in the lowest (ex ante) ESG quartile, we find that these firms outperform the matched firms by 7.1% (7.5%) in the 6 months (1 year) after the activist ends the engagement. These successfully engaged low-ESG firms outperform the firms of which the activist closed the file unsuccessfully: successful firms have an average ECAR of 8.4% over the 6-month period (and outperform the unsuccessful ones by 2.4%) and of 11.3% over the year (and outperform the unsuccessful firms by 6.8%). This implies that it is important to target low ESG firms as they then significantly outperform their not-

¹⁵ As a robustness check, we also use Fama-French-Carhart factors, 17 Fama-French industry portfolios, as well as size and book-to-market matched portfolios. We find that the results are qualitatively similar.

engaged peers. This pattern is not visible for engaged firms with an (ex-ante) high ESG classification; they do not obtain significant ECARs. Firms targeted for environmental or governance deficiencies exhibit significant and positive ECARs of 3% (over a 6-month period) and 14.1% (over a one-year period), respectively.¹⁶

Figure 2 corroborates the findings in Table 7: the CARs for the successful engagements remain flat for about 6-7 months, where after the CARs decline. The decrease in CARs for unsuccessful cases sets in after about one month since completion. The gap in the CARs between successful and unsuccessful cases reaches a maximum after about 8-12 months. For North-American successfully engaged targets, the CARs remain positive until about 9 months and then rapidly decline whereas the CARs of the unsuccessful cases goes down after 2 months, showing a big gap in CARs after about 8-9 months. For European targets, there is hardly a difference in CARs between (un)successful targets; their CARs gradually decrease after about 9 months.¹⁷

Taken together, the results in Table 6 and 7 imply that the activist can make a modest return provided he sells his share stake in the successfully target 6 to 12 months after closing the case and within 3 months in unsuccessfully engaged firms.¹⁸

–Insert Table 7 and Figure 2 about here–

¹⁶ Given that the activist focuses mostly on the E and S factors and less on governance, the subsample of (un)successful cases is rather small which may explain the reason why the unsuccessfully closed cases yield higher ECARs than the successful ones).

¹⁷ The analysis on subsamples based on regions is not shown for reasons of conciseness but is available upon request.

¹⁸ A natural extension of this work is to look into the portfolio holdings of the activist in more detail. Since the activists' primary objective is to generate financial returns through their stock holdings and engagements, it is important to further investigate their holdings and check if there is a different point in time when they realize returns, not when they actually close the file. The available data on fund holding changes are not sufficiently precise – we would need daily data – to enable us to a return calculation at the fund level. On the same note, the definition of a successful engagement is determined by the activist.

9. Conclusion

By means of a large detailed, global dataset comprising the aspects the activism on corporate social responsibility that takes place behind the scenes by a major investment fund, we analyze the reasons and success of corporate engagement. We match each engaged firm with three firms that were not engaged and are most similar to the engaged firms in terms of size, market-to-book ratio, ROA, and ESG score in the year prior to the engagement and belong to the same industry.

The activist generally targets large firms with large market shares. Targeted firms are more likely to be in the highest ex-ante ESG quartile, which is somewhat surprising as one would expect the activist to concentrate on firms with poor ESG performance if ESG improvements are expected to be related to the generation of value. Relative to the matched sample, target firms have a higher stock market performance, a higher product market share, and are more visible (have more analyst coverage). The firms that are engaged on corporate governance issues are somewhat smaller, have a dispersed ownership structure, have lower potential growth opportunities (Tobin's Q) but are otherwise profitable (both in terms of previous year buy-and-hold returns and accounting performance).

Next, we study whether the engagement is successfully completed or not. The definition of success is the activist's and reflects whether the target firm has complied with the activist's demands. One could question the relevance of this definition, considering that in some cases compliance may require little effort from the firm. In other cases, the target is asked to make substantial changes in terms of board or asset restructuring or in ESG-related operations, which is less likely to lead to a successful

closure of the case. It is hence not surprising that when a “hard” engagement occurs, the likelihood of successful engagement is lower than in cases just requiring more ESG transparency and information provision. Eventual success of the engagement does not depend on joint targeting nor on who is the main contact in the target firm (management or non-executive directors). More intensive contact between the activist and the target does yield success more frequently, though only for European targets. Also, companies that were targeted in the past and complied with the activist’s requests are also more likely to do so again. European firms under pressure - with declines in sales and negative buy-and-hold returns - more frequently adopt the activist’s suggestions. Our results also reveal that firms with a good ESG track record prior to engagement (e.g. the firms in the highest ESG performance quartile in North-America and Europe) are more likely to comply with the requests of the activists. Firms that did not care much about ESG issues continue to do so as they seem reluctant to adopt the suggestions by the CSR activist.

The real effects of engagement of the target firm are rather modest. Our differences-in-differences analyses reveal that, on average, accounting performance measures and its components do not significantly improve after engagement. The only exception are sales, which significantly grow after the engagement, both statistically and economically.

Interestingly, the mere engagement – independent of the ultimate success of the engagement case – triggers changes in the ESG profile of the target, which is picked up by the independent ESG evaluation providers. Firms with poor ex-ante ESG performance scores obtain higher ESG score, whereas for the firms in the highest ex-ante ESG quartile we observe the inverse change: here, all the ESG scores go down after the engagement. If the activist correctly identifies companies with an ESG problem, then subsequent ESG ratings may reflect this new information and the adjusted ESG scores then incorporate the potential ESG problem, which drives the scores down. Previously low-rated companies

are not “lost cases” and late best-performers might still have room for improvement. As the activist engages companies, the rating agency seems to realize that previous scores did not incorporate all of the activist’s concerns in that engaged companies still had key ESG points to improve on.

From the activist’s perspective, the activism seems to come with, at best, modest financial returns the period immediately following the successful closing of the cases, though we find no evidence that targets are negatively affected by the activism. On average, the buy-and-hold returns for completed engagement are small, but still positive and statistically significant in the month following the closure of a case (at 0.8%). These returns can be dissected into positive returns that stem from the successfully closed cases (generating BHRs of 1.2%) and zero BHRs for unsuccessful engagements. Over longer time windows (e.g. six months), successful cases generate returns of 4.3% whereas unsuccessful ones incur stock price decreases by 3.1%. Further extending the time period to one year, reveals strong return differences between the successful and non-successful cases. Successful reorganizations, which require most compliance effort from the target, yield BHRs of 2.3% in the month the completion of the engagement, and over a longer time window of 6 months, the BHRs of unsuccessful reorganization attempts are negative by 3.5%.

When we partition the engagement files by ESG dimension, we find significant differences: the largest BHRs are generated by successfully engaging targets on environmental and governance issues (the one-month BHRs amount to 1.8% and 2.9%, respectively). Over the time window of 6 months after the end of the engagement, successful environmental, social, and governance engagements outperform their unsuccessful counterparts by 10.1%, 4.0%, and 1.6%, respectively. When we turn to BHRs over one year, we report that governance engagement yield a return of 8.4%, and that

successful social engagements are 8.3% higher than the unsuccessful cases.

The BHRs calculated over the 18 months starting one month prior to the engagement diverge most for successful and unsuccessful engagement for the period 6 to 12 months following the completion of the case.

An analysis of excess cumulative abnormal returns, controlling for exposure to global market, size, book-to-market and momentum factors, and measured relative to the CARs of matched peer firms, shows that that the engaged firms slightly outperform the non-engaged ones: the average ECARs are positive (0.5%) and significantly different from zero in the month after the completion of the engagement, and augment to 2.7% over the 6-month period after the engagement file is closed. Reorganization demands by the activist make a targeted firm outperform its non-targeted (but otherwise similar) peer-company by 4.4% in the six months after the completion of the activist's case. Targeting firms in the lowest (ex-ante) ESG quartile pays off in the sense that these firms outperform their matched peers by 7.1% (7.5%) in the 6 months (1 year) after the activist ends the engagement. Furthermore, successfully engaged low-ESG firms outperform the unsuccessfully engaged low-ESG firms; the former have average ECAR of 8.4% over the 6-month period (and outperform the unsuccessful ones by 2.4%) and of 11.3% over the year (and outperform the unsuccessful firms by 6.8%).

10. References

- Albuquerque, Rui, Yrjo Kokskenen, & Chendi Zhang. (2017). *Corporate Social Responsibility and Firm Risk: Theory and Empirical Evidence*. ECGI Working paper. No. 359/2013.
- Bainbridge, Stephen M. (2008). *Investor Activism: Reshaping the Playing Field*. Law-Econ Research Paper. UCLA School of Law, No. 08-12.
- Barko, Tamas, & Luc Renneboog. (2016). Mutual Funds: Management Styles, Social Responsibility, Performance, and Efficiency. In H. K. Baker, G. Filbeck & H. Kaymaz (Eds.), *Mutual Funds and Exchange-Traded Funds* (pp. 268-290). New York, New York: Oxford University Press.
- Baron, David P. (2008). Managerial contracting and corporate social responsibility. *Journal of Public Economics*, 92(1–2), 268-288.
- Bebchuk, Lucian A., Alon Brav, & Wei Jiang. (2017). The Long-Term Effects of Hedge Fund Activism. *Columbia Law Review*, 115(5), 1-63.
- Bebchuk, Lucian A., Alma Cohen, & Allen Ferrell. (2009). What Matters in Corporate Governance? *Review of Financial Studies*, 22(2), 783-827.
- Becht, Marco, Julian Franks, Jeremy Grant, & Hannes Wagner. (2017). Returns to Hedge Fund Activism: An International Study. *Review of Financial Studies*, forthcoming.
- Becht, Marco, Julian Franks, Colin Mayer, & Stefano Rossi. (2009). Returns to Shareholder Activism: Evidence from a Clinical Study of the Hermes UK Focus Fund. *Review of Financial Studies*, 22(8), 3093-3129.
- Benmelech, Efraim, & Jennifer Dlugosz. (2009). The Credit Rating Crisis. *NBER Macro Annual*, 2009(1), 161-207.
- Bollen, Nicolas. 2007. Mutual fund attributes and investor behavior. *Journal of Financial and Quantitative Analysis*, 42(3), 683-708.

- Bénabou, Roland, & Jean Tirole. (2006). Incentives and Prosocial Behavior. *American Economic Review*, 96(5), 1652-1678.
- Brav, Alon, Wei Jiang, Frank Partnoy, & Randall Thomas. (2008). Hedge Fund Activism, Corporate Governance, and Firm Performance. *Journal of Finance*, 63(4), 1729-1775.
- Capelle-Blancard, Gunther, & Stéphanie Monjon. (2014). The Performance of Socially Responsible Funds: Does the Screening Process Matter? *European Financial Management*, 20(3), 494-520.
- Cremers, Martijn, Erasmo Giambona, Simone M. Sepe, & Ye Wang. (2015). *Hedge Fund Activism and Long-Term Firm Value*. Working paper.
- Cremers, Martijn, & Antti Petajisto. (2009). How Active Is Your Fund Manager? A New Measure That Predicts Performance. *Review of Financial Studies*, 22(9), 3329-3365.
- Dimson, Elroy, Oğuzhan Karakaş, & Xi Li. (2015). Active Ownership. *Review of Financial Studies*, 28(12), 3225-3268.
- Doidge, Craig, Alexander Dyck, Hamed Mahmudi, & Aazam Virani. (2015). *Can Institutional Investors Improve Corporate Governance Through Collective Action*. Working paper Rothman School of Management, University of Toronto.
- Dyck, Alexander, Karl Lins, Lukas Roth, & Hannes Wagner. (2015). *Do Institutional Investors Drive Corporate Social Responsibility? International Evidence*. Working paper Bocconi University.
- 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. (2012). The Link Between Job Satisfaction and Firm Value, With Implications for Corporate Social Responsibility. *The Academy of Management Perspectives*, 26(4), 1-19.

- Edmans, Alex, Clifford G. Holderness. (2017). Blockholders: A Survey of Theory and Evidence. In Benjamin Hermalin & Michael Weisbach (Eds.), *The Handbook of the Economics of Corporate Governance*. North Holland: Elsevier.
- English II, Philip C., Thomas I. Smythe, & Chris R. McNeil. (2004). The “CalPERS Effect” Revisited. *Journal of Corporate Finance*, 10(1), 157-174.
- Eurosif. (2014). European SRI Study: Eurosif.
- Ferrell, Alan, Liang. Hao, & Luc Renneboog. (2016). Socially Responsible Firms. *Journal of Financial Economics*, 122 (3), 585-606.
- Flammer, Caroline. (2015). Does Corporate Social Responsibility Lead to Superior Financial Performance? A Regression Discontinuity Approach. *Management Science*, 61(11), 2549-2568.
- Gaspar, José-Miguel, Massimo Massa, Pedro Matos, Rajdeep Patgiri, & Zahid Rehman. (2013). Payout Policy Choices and Shareholder Investment Horizons. *Review of Finance*, 17(1), 261-320.
- Gil-Bazo, Javier, Pablo Ruiz-Verdu, & Andre A. P. Santos. (2010). The Performance of Socially Responsible Mutual Funds: The Role of Fees and Management Companies. *Journal of Business Ethics*, 94(2), 243-263.
- Gibson, Rajna, & Philipp Krueger. (2017). The Sustainability Footprint of Institutional Investors. Swiss Finance Institute Research Working Paper No. 17-05
- Gillan, Stuart L., & Laura T. Starks. (2003). Corporate Governance, Corporate Ownership, and the Role of Institutional Investors: A Global Perspective. *Journal of Applied Finance*, 13(2), 4-22.
- Gillan, Stuart L., & Laura T. Starks. (2007). The Evolution of Shareholder Activism in the United States. *Journal of Applied Corporate Finance*, 19(1), 55-73.
- Global Sustainable Investment Alliance. (2015). Global Sustainable Investment Review 2014. *Global Sustainable Investment Alliance*.

- Gompers, Paul, Joy Ishii, & Andrew Metrick. (2003). Corporate Governance and Equity Prices. *The Quarterly Journal of Economics*, 118(1), 107-156.
- Greenwood, Robin, & Michael Schor. (2009). Investor Activism and Takeovers. *Journal of Financial Economics*, 92(3), 362-375.
- Hoepner, Andreas, Ioannis Oikonomou, Zacharias Sautner, Laura T. Starks & Xiaoyan Zhou. (2016). *ESG Shareholder Engagement and Downside Risk*. Working paper.
- Hong, Harrison, Jeffrey D. Kubik, & Jose A. Scheinkman. (2012). *Financial Constraints on Corporate Goodness*. NBER Working paper. No. 18476.
- Hong, Harrison, & Inessa Liskovich. (2016). *Crime, Punishment and the Halo Effect of Corporate Social Responsibility*. NBER Working paper. No. 21215.
- Klein, April, & Emanuel Zur. (2009). Entrepreneurial Shareholder Activism: Hedge Funds and Other Private Investors. *The Journal of Finance*, 64(1), 187-229.
- Klein, April, & Emanuel Zur. (2011). The Impact of Hedge Fund Activism on the Target Firm's Existing Bondholders. *Review of Financial Studies*, 24(5), 1735-1771.
- Krueger, Philipp. (2013). Corporate Goodness and Shareholder Wealth, *Journal of Financial Economics*, 115(2), 304-329.
- Leuven, Edwin, & Barbara Sianesi. (2003). PSMATCH2: Stata Module to Perform Full Mahalanobis and Propensity Score Matching, Common Support Graphing, and Covariate Imbalance Testing. *Statistical Software Components*.
- Liang, Hao, & Luc Renneboog. (2017). On the Foundations of Corporate Social Responsibility. *Journal of Finance*, 72(2), 853-910.
- Lins, Karl, Servaes, Henri & Ane Tamayo. (2017). Social Capital, Trust, and Firm Performance: The Value of Corporate Social Responsibility during the Financial Crisis, *Journal of Finance*, forthcoming.
- Margolis, Joshua D., Hillary Anger Elfenbein, & James P. Walsh. (2011). *Does it Pay to Be Good... And Does it Matter? A Meta-Analysis of the Relationship between*

- Corporate Social and Financial Performance*. Working Paper Harvard Business School.
- Maug, Ernst. (1998). Large Shareholders as Monitors: Is There a Trade-Off between Liquidity and Control? *Journal of Finance*, 53(1), 65-98.
- Nelson, James M. (2006). The “CalPERS Effect” Revisited Again. *Journal of Corporate Finance*, 12(2), 187-213.
- Renneboog, Luc, Jenke Ter Horst, & Chendi Zhang. (2008a). Socially Responsible Investments: Institutional Aspects, Performance, and Investor Behavior. *Journal of Banking & Finance*, 32(9), 1723-1742.
- Renneboog, Luc, Jenke Ter Horst, & Chendi Zhang. (2008b). The Price of Ethics and Stakeholder Governance: The Performance of Socially Responsible Mutual Funds, *Journal of Corporate Finance*, 14(3), 302-322.
- Renneboog, Luc, Jenke Ter Horst, & Chendi Zhang. (2011). Is Ethical Money Financially Smart? Nonfinancial Attributes and Money Flows of Socially Responsible Investment Funds, *Journal of Financial Intermediation*, 20(4), 562-588.
- Smith, Michael P. (1996). Shareholder Activism by Institutional Investors: Evidence from CalPERS. *The Journal of Finance*, 51(1), 227-252.
- Stuart, Elizabeth A. (2010). Matching Methods for Causal Inference: A Review and a Look Forward. *Statistical Science*, 25(1), 1-21.
- UN Global Compact. (2015). Impact: Transforming Business, Changing the World. *UN Global Compact*.
- UN Principles for Responsible Investing. (2015). Report on Progress 2015. *UN Principles for Responsible Investing*. New York: United Nations.
- US SIF. (2014). Annual Report: US SIF and US SIF Foundation. *US SIF*.
- Watkins, Michael. (2010). How BP Could Have Avoided Disaster. *Harvard Business Review*, 88(6), 7-8.

11. Figures and tables

Figure 1: Buy-and-hold returns after completion. The figure shows buy-and-hold returns for an equally weighted portfolio of engaged companies. The portfolios are formed at the completion of engagements.

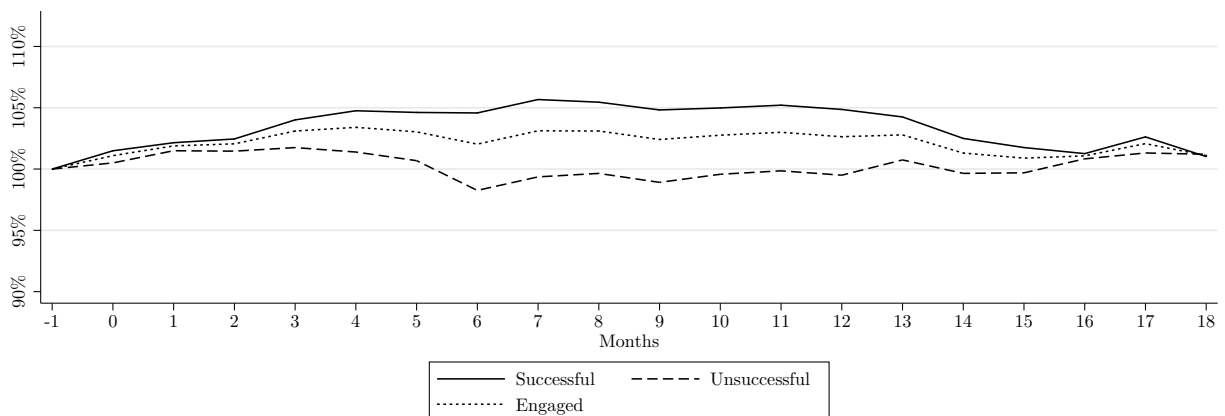


Figure 2: Cumulative abnormal returns after completion. The figure shows cumulative abnormal returns for equally weighted portfolio of engaged companies and above a matched sample. The portfolios are formed at the completion of engagements. Returns are adjusted for Fama-French-Carhart global factors.

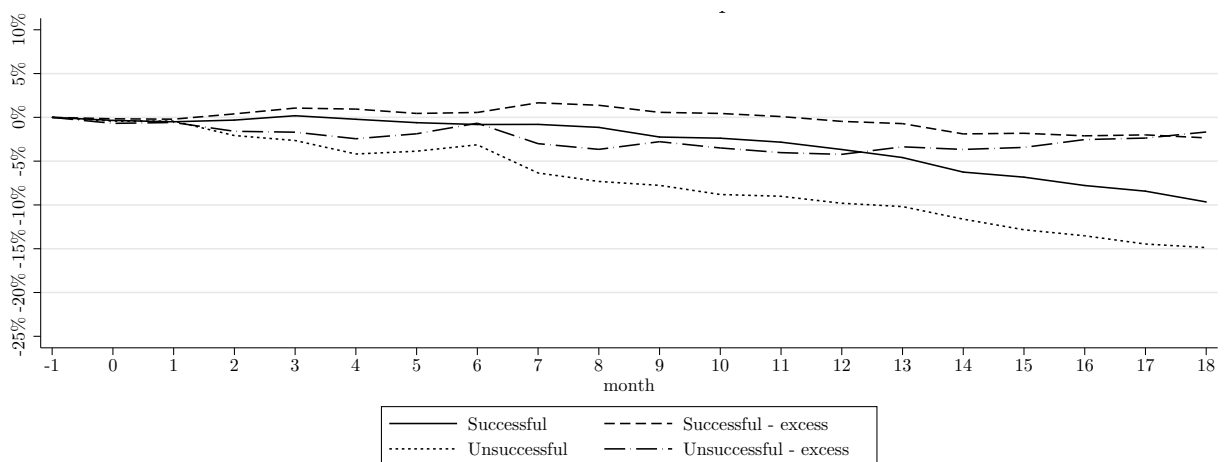


Table 1 – Panel A: Engagement characteristics by outcome

This table shows the breakdown of completed engagements by ESG themes and topics. A further breakdown of engagement topics is provided in Appendix B. In the first part, the number and percentage of all and successful engagements are reported. The second and third part report statistics for the number of contacts, the length of the engagement and the typical contact type, for successful and unsuccessful cases, respectively. The length of engagement sequences is defined in calendar days. The contact type is the most frequently applied contact channel per topic. Percentages are calculated over all cases.

	Whole Sample (1)						Successful (2)						Unsuccessful (3)					
	All engagements		Successful		Contact number		Length of sequence		Contact type		Contact number		Length of sequence		Contact type			
	N	%	N	%	Mean	Median	Mean	Median	%		Mean	Median	Mean	Median	%			
Theme: Environmenta																		
Climate Change	21	5.9%	17	81.0%	5.2	5	584.4	491	Email	41.2%	4.8	4.5	383.8	500	Email	75.0%		
Ecosystem Services	113	31.6%	64	56.6%	5.2	4	857.8	909	Email	50.0%	3.9	4	700.9	895	Letter	65.3%		
Environmental Mgmt.	224	62.6%	109	48.7%	3.1	2	379.6	328	Letter	37.6%	2.5	2	583.0	730	Letter	62.6%		
Total	358	42.3%	190	53.1%	4.0	3	559.0	451	Letter	42.1%	2.9	2	612.6	730	Letter	63.7%		
Theme: Social																		
Public Health	30	8.4%	27	90.0%	3.0	2	395.5	341	Meeting	37.0%	1.7	2	329	357	Email	66.7%		
Human Rights and Ethics	238	66.5%	116	48.7%	3.3	3	424.1	374.5	Letter	37.1%	2.7	3	479.6	491	Letter	47.5%		
Labor Standards	99	27.7%	80	80.8%	4.6	4	647.4	716	Email	63.7%	6.3	5	938.9	1,064	Email	68.4%		
Total	367	43.3%	223	60.8%	3.7	3	500.7	391	Letter	46.6%	3.1	3	537.1	491	Letter	50.7%		
Theme: Governance																		
Corporate Governance	86	70.5%	66	76.7%	3.4	2	448.6	270.5	A/EGM	39.4%	2.3	2.5	234.4	98	A/EGM	50.0%		
Mgmt. and Reporting	36	29.5%	30	83.3%	4.3	3.5	402.5	388	Meeting	36.7%	3	2.5	600.2	681.5	Meeting	33.3%		
Total	122	14.4%	96	78.7%	3.7	3	434.2	355.5	Letter	38.5%	2.4	2.5	318.8	196.5	Email	46.2%		
Total	847		509	60.1%														

Table 1 – Panel B: Number of engagements by reorganization and target firm receptiveness

This table shows the breakdown of completed engagements by ESG themes and topics. A further breakdown of topics is provided in Appendix B. An engagement case is defined as reorganization if the engager requests a change in the strategy or governance of the firm. A company is deemed as receptive if it responds to the request of the engager. The first part of the table reports the breakdown of reorganization cases, and receptiveness by firms for all cases. The second and third part of the table give a breakdown of reorganization and receptiveness by successful and unsuccessful cases, respectively. Percentages are calculated over all cases for each topic.

	Full sample (1)						Successful (2)						Unsuccessful (3)					
	All		Reorganization		Receptiveness		Reorganization		Receptiveness		Reorganization		Receptiveness		Reorganization		Receptiveness	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Theme: Environmental																		
Climate Change	21	0	0	0.0%	17	81.0%	0	0.0%	16	76.2%	0	0.0%	1	4.8%				
Ecosystem Services	113	74	65.5%	82	72.6%	31	27.4%	56	49.6%	43	38.1%	26	23.0%					
Environmental Mgmt.	224	178	79.5%	116	51.8%	69	30.8%	107	47.8%	109	48.7%	9	4.0%					
Total	358	252	70.4%	215	60.1%	100	27.9%	179	50.0%	152	42.5%	36	10.1%					
Theme: Social																		
Public Health	30	0	0.0%	24	80.0%	0	0.0%	21	70.0%	0	0.0%	3	10.0%					
Human Rights and Ethics	238	124	52.1%	143	60.1%	47	19.7%	115	48.3%	77	32.4%	28	11.8%					
Labor Standards	99	2	2.0%	90	90.9%	1	1.0%	78	78.8%	1	1.0%	12	12.1%					
Total	367	126	34.3%	257	70.0%	48	13.1%	214	58.3%	78	21.3%	43	11.7%					
Theme: Governance																		
Corporate Governance	86	49	57.0%	67	77.9%	34	39.5%	64	74.4%	15	17.4%	3	3.5%					
Mgmt. and Reporting	36	9	25.0%	33	91.7%	8	22.2%	30	83.3%	1	2.8%	3	8.3%					
Total	122	58	47.5%	100	82.0%	42	34.4%	94	77.0%	16	13.1%	6	4.9%					
Total	847	436	51.5%	572	67.5%	190	22.4%	487	57.5%	246	29.0%	85	10.0%					

Table 2: Descriptive statistics

This table reports summary statistics for all variables. For each case, we keep the first firm-year observation and use a lag of one year. The control sample is determined by Mahalanobis distance metric matching. For all engaged companies, we draw 3 matching pairs with replacement. The Mahalanobis distance is determined based on industry, ESG score, size, market-to-book ratio and ROA. The t-statistics stand for the difference in means between the engaged and the control group. The Z-score is calculated for the Wilcoxon signed rank test, for which we use the median difference between the engaged firm and the control group. For the t-statistics and Z-scores we report p-values in brackets. Variables are winsorized at 2.5% on both tails of the distribution. All variable definitions are in the Appendix.

Variable	All cases						Control		Difference	
	Obs.	Mean	Sdev.	25%	Median	75%	Obs.	Mean	t-test	Rank
ESG ratings										
ESG score	705	77.315	23.821	70	88.520	94.010	2,337	67.861	[0.000]	[0.000]
Environmental score	705	74.627	25.317	63.900	86.990	93.030	2,336	67.412	[0.000]	[0.000]
Social score	705	76.913	23.534	67.860	86.770	94.010	2,336	67.194	[0.000]	[0.000]
Governance score	705	64.412	26.324	45.940	73.910	85.530	2,336	57.244	[0.000]	[0.000]
Economic score	705	71.345	26.151	54.780	81.480	92.660	2,336	63.508	[0.000]	[0.000]
E-index	641	0.376	0.252	0.250	0.250	0.500	1,988	0.360	[0.136]	[0.151]
Risk and performance										
Buy-and-hold return	833	0.075	0.459	-0.209	0.067	0.290	2,544	0.052	[0.224]	[0.835]
Volatility	826	0.324	0.183	0.185	0.280	0.409	2,530	0.327	[0.609]	[0.001]
Amihud ILLIQ	827	0.176	0.851	0	0	0.002	2,452	0.164	[0.703]	[0.000]
Asset turnover	846	0.848	0.566	0.460	0.760	1.130	2,544	0.827	[0.375]	[0.371]
Profit margin	841	0.080	0.147	0.035	0.071	0.123	2,537	0.083	[0.637]	[0.177]
ROA	846	0.059	0.064	0.020	0.052	0.090	2,544	0.053	[0.009]	[0.000]
ROE	846	0.157	0.166	0.086	0.152	0.235	2,544	0.133	[0.000]	[0.000]
Sales growth	835	0.101	0.290	-0.061	0.079	0.219	2,534	0.109	[0.445]	[0.020]
Market share	847	0.028	0.030	0.004	0.015	0.048	2,544	0.017	[0.000]	[0.000]
Market-to-book	843	2.578	1.986	1.338	1.982	3.202	2,544	2.361	[0.001]	[0.255]
Tobin's Q	843	1.977	1.284	1.124	1.604	2.392	2,544	1.891	[0.073]	[0.033]
Cash and expenses										
Cash holding	846	0.066	0.073	0.019	0.041	0.084	2,544	0.067	[0.771]	[0.000]
CapEX	846	0.053	0.046	0.021	0.041	0.075	2,544	0.057	[0.060]	[0.000]
Operating expenses	817	0.862	0.128	0.806	0.881	0.938	2,532	0.862	[0.933]	[0.779]
Size and capital structure										
Log total assets	846	9.623	1.858	8.461	9.862	11.060	2,544	9.293	[0.000]	[0.000]
Log sales	841	9.146	1.719	8.177	9.549	10.617	2,537	8.798	[0.000]	[0.000]
Log market equity	843	9.164	1.752	8.095	9.486	10.802	2,544	8.907	[0.000]	[0.000]
Book leverage	846	0.327	0.220	0.161	0.302	0.461	2,544	0.320	[0.381]	[0.408]
Tangibility ratio	845	0.313	0.234	0.119	0.271	0.479	2,538	0.338	[0.010]	[0.000]
Other										
Dividend yield	843	0.029	0.027	0.011	0.024	0.040	2,544	0.026	[0.012]	[0.138]
Dividend payout	846	0.389	0.508	0.121	0.325	0.525	2,544	0.353	[0.070]	[0.756]
Company age	845	51.850	52.544	14	37	81	2,544	52.573	[0.681]	[0.000]
Analysts	810	19.076	10.621	11	19	27	2,502	14.169	[0.000]	[0.000]

Continued on next page

Continued from previous page

Variable	All cases						Control		Difference	
	Obs.	Mean	Sdev.	25%	Median	75%	Obs.	Mean	t-test	Rank
Ownership										
Holding of engager	847	0.002	0.002	0	0.001	0.002	2,544	0.001	[0.051]	[0.580]
Average ownership	847	0.048	0.077	0.011	0.019	0.048	2,544	0.046	[0.314]	[0.000]
Blockholders	847	3.851	1.813	3	4	5	2,544	4.092	[0.001]	[0.000]
Funds	847	0.018	0.068	0	0	0	2,544	0.015	[0.196]	[0.000]
Hedge fund & PE	847	0.009	0.020	0	0.003	0.007	2,544	0.010	[0.172]	[0.000]
Individuals	847	0.018	0.068	0	0	0	2,544	0.015	[0.196]	[0.000]
Independent firm	829	0.840	0.367	1	1	1	2,498	0.848	[0.547]	[0.000]

Table 3: Analysis of targeting by engagement themes

This table reports the marginal effects obtained from probit regressions on the probability of targeting relative to a matched sample, where the dependent variable is 1 if a company is targeted and 0 otherwise. The first two columns report regression results for the whole sample of engagements (1-2), while the second, third and fourth set of columns refer to Environmental (3-4), Social (5-6) and Governance (7-8) cases, respectively. Marginal effects are evaluated at the mean of the respective independent variable. The variable "ESG score" is the equal ESG rating for the full sample and the corresponding score for each specific engagement theme, expressed as a percentage. Standard errors are clustered at the firm level. The matching sample is determined by Mahalanobis score matching on industry, size, market-to-book, ESG and ROA. Variable definitions are provided in the Appendix. *, ** and *** indicate statistical significance at the 10%, 5% and 1% level, respectively.

	Full sample		Environmental		Social		Governance	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Log total assets	-0.033***	-0.009	-0.001	0.012	-0.015**	0.005	-0.017***	-0.028***
Tobin's Q	-0.008	-0.001	0.001	0.008	0.002	0.006	-0.015***	-0.025***
Sales growth	0.001	-0.045	0.002	-0.014	-0.034	-0.053	0.025	0.014
BHR over 12 months	0.084***	0.114***	0.014	0.020	0.044***	0.060***	0.029***	0.050***
ROA	0.146	0.034	0.045	-0.028	0.094	0.058	0.001	-0.001
Sales market share	3.838***	3.453***	1.114***	0.915**	1.783***	1.403***	0.798***	1.040***
Cash holding	-0.005	0.050	0.066	0.032	-0.017	0.043	0.017	0.076
Book leverage	0.018	0.036	0.052	0.046	-0.053	-0.029	0.005	0.008
Dividend yield	0.600	1.451**	0.233	0.633**	0.214	0.564	0.252	0.528***
CapEX	0.014	-0.020	0.190	0.197	-0.177	-0.322	-0.127	-0.095
Amihud ILLIQ	0.001	-0.354*	-0.027	-0.185**	0.009	-0.097	-0.011	-0.512
Analysts	0.013***	0.016***	0.005***	0.005***	0.005***	0.006***	0.003***	0.004***
Previous engagement	-0.014	-0.019**	-0.025***	-0.030***	-0.004	-0.004	0.008***	0.009***
Holding of engager		4.276		1.327		0.936		1.898***
Independent company		0.032		0.008		0.018		0.018
Entrenchment index		-0.023		-0.011		-0.028		0.012
ESG score		-0.103*						
E score				-0.046				
S score						-0.057*		
G score								-0.001
Year FE	yes	yes	yes	yes	yes	yes	yes	yes
Industry FE	yes	yes	yes	yes	yes	yes	yes	yes
Geographic FE	yes	yes	yes	yes	yes	yes	yes	yes
Pseudo R2	0.10	0.18	0.12	0.15	0.11	0.16	0.27	0.33
N	3,174	2,478	3,174	2,478	3,174	2,478	3,174	2,478

Table 4: Analysis of success

This table reports the marginal effects obtained from linear probability regressions on the probability of success. The dependent variable equals 1 if the engagement is successful and 0 otherwise. The first two columns report regression results for the whole sample of engagements (1-2), while the second, third and fourth set of columns refer to environmental (3-4), social (5-6) and governance (7-8) cases, respectively. Standard errors are clustered at the firm level. The dummy “Reorganization” takes the value 1 for reorganization cases and 0 otherwise. The dummy variable “Joint targeting” equals one for cases where the engager contacts the company with a group of other activists. The variable “Contacted executives” is 1 if executive management is contacted and 0 otherwise. “Number of activities” and “Success streak” refer to the number of contacts per case and the number of previous successful cases with the company. Other variable definitions are provided in the Appendix. *, ** and *** indicate statistical significance at the 10%, 5% and 1%, respectively.

	Full sample		Environmental		Social		Governance	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Reorganization	-0.170***	-0.159***	-0.376***	-0.275**	0.018	-0.019	-0.044	0.039
Joint targeting	0.043	0.030	0.083	0.074	0.049	0.055	-0.165	-0.221
Contacted executives	-0.05	-0.040	0.012	-0.126	-0.193**	-0.085	-0.049	0.027
Number of contacts	0.005	0.005	0.006	0.012	-0.025**	-0.02	0.014	0.012
Success streak	0.031**	0.021*	0.056**	0.045*	0.007	0.016	0.017	-0.017
Log total assets	0.021	-0.053**	0.021	-0.089**	0.048*	-0.039	0.053	0.152**
Tobin’s Q	-0.005	-0.019	-0.01	-0.074	-0.021	-0.019	-0.002	0.074
Sales growth	-0.244***	-0.353***	-0.209*	-0.304*	-0.215*	-0.314**	-0.632***	-1.123***
BHR over 12 months	-0.007	-0.048	-0.018	0.012	0.015	0.058	-0.259	-0.433**
ROA	-0.16	-0.314	-0.569	0.145	0.846	-0.363	1.113	1.968*
Sales market share	1.134	1.906**	-0.363	0.358	1.993*	2.796**	-0.997	-0.91
Cash holding	-0.225	-0.723**	-0.959**	-1.327***	0.184	-0.568	0.473	0.304
Book leverage	0.054	-0.089	-0.176	-0.087	0.280**	-0.097	0.363	-0.024
Dividend yield	-0.53	0.295	-0.508	0.941	-0.54	-0.08	-1.995	-0.831
CapEX	-0.213	0.322	-0.739	-0.483	0.984	2.173*	-0.149	1.117
Amihud ILLIQ	0.007	0.389	0.119**	-0.178	0.015	1.192**	0.331**	-6.162
Analysts	0.001	-0.001	-0.003	-0.006	0.004	0.007*	-0.005	-0.018*
Toehold		0.007		-0.007		0.005		-0.019
Toehold increase		-0.014		-0.1		0.047		0.104
Independent company		0.076		-0.007		0.099		-0.264
Entrenchment index		0.020		0.121		-0.163		-0.411
ESG rating		0.448***						
E rating				0.575***				
S rating						0.398**		
G rating								0.075
Year FE	yes	yes	yes	yes	yes	yes	yes	yes
Geographic FE	yes	yes	yes	yes	yes	yes	yes	yes
Industry FE	yes	yes	yes	yes	yes	yes	yes	yes
Adjusted R2	0.20	0.22	0.22	0.24	0.27	0.30	0.08	0.18
N	784	577	336	255	332	227	116	95

Table 5: Financial and ESG performance, and ownership after engagement by regions

This table reports the results of differences-in-differences estimations of the effect of engagement and success on financial and ESG performance, as well as changes in ownership. The table reports the coefficient of the differencing term. The pre-treatment period is defined one year before the start of an engagement sequence. In panel A, post-treatment is defined one year after completion. In Panel B, post-treatment is defined two years after the first contact with the company. The period variable is 1 for post-treatment and 0 otherwise in both panels. In Panel A, the treatment is success versus no success, where the treatment variable is 1 for success and 0 otherwise. In Panel B, the treatment is engaged versus matched companies, where the treatment variable is 1 for engaged companies and 0 for the control sample. The matching sample is determined by Mahalanobis score matching on industry, size, market-to-book, ESG and ROA. Leverage, size, tangibility, and industry and time fixed effects are included in all specifications. Additionally, for Tobin's Q ROA, CapEx and sales growth are also included. Standard errors are clustered at the firm level. *, ** and *** indicate significance at the 10%, 5% and 1% level, respectively.

Panel A: Success vs. no success							
	All cases	Reorg.	Lowest ESG quartile	Highest ESG quartile	E cases	S cases	G cases
Tobin's Q	-0.043	-0.008	-0.167	0.110	0.036	-0.124	0.266*
ROA	-0.003	-0.003	0.006	0.002	0.008	-0.006	-0.019
Operating expenses	0.002	-0.006	0.014	-0.012	-0.008	0.008	-0.019
CapEX	0.004	0.002	0.001	0.003	0.005	0.001	-0.001
Sales growth	0.076***	0.053*	0.093*	0.103*	0.097***	0.032	0.229**
Sales market share	0.000	0.001	-0.002	0.003	0.002	0.000	0.000
Profit margin	-0.018	-0.005	0.004	0.001	0.022	-0.039**	-0.093
Asset turnover	0.010	-0.023	0.032	0.004	0.003	0.023	-0.043
Long-term holdings	0.304	-0.217	0.527	-1.708	2.098**	-0.778	-4.161
Holding of engager	0.012	0.012	0.007	-0.028*	-0.019	0.043**	-0.010
ESG rating	-0.654	1.605	10.635***	-0.231	1.844	-3.849	-0.953
Environmental score	0.129	2.780	13.917***	-0.491	1.552	-2.122	-3.103
Social score	-0.491	1.557	4.394	-1.016	0.143	-2.374	-0.553
Governance score	-1.855	-0.905	-2.513	0.900	1.157	-4.603*	-2.629
Economic score	-1.129	1.612	6.429	6.070	2.604	-4.368	0.265
Entrenchment index	0.026	0.037	0.003	0.031	0.002	0.040	0.016
Analysts	-0.336	-0.147	-0.468	-1.567	-1.037	0.470	0.522

Panel B: Engaged vs. matched							
	All cases	Reorg.	Lowest ESG quartile	Highest ESG quartile	E cases	S cases	G cases
Tobin's Q	0.013	0.039	-0.060	0.019	0.058	-0.062	0.093
ROA	-0.000	-0.003	0.008	-0.005	0.001	0.001	-0.005
Operating expenses	0.003	0.004	0.010	0.000	-0.007	0.010	0.009
CapEX	0.002	0.000	-0.002	0.003	0.002	0.000	0.007**
Sales growth	-0.011	-0.018	0.031	-0.015	0.005	-0.008	-0.064
Sales market share	-0.001***	-0.001	0.000	-0.004**	-0.001	-0.002**	-0.002
Profit margin	0.002	-0.004	0.026	-0.008	0.000	0.003	0.004
Asset turnover	-0.016	-0.028**	-0.014	-0.050**	-0.004	-0.022	-0.030
Long-term holdings	0.520	0.380	-0.155	1.178	0.379	0.282	1.659*
Holding of engager	0.009	-0.004	-0.025	0.017	-0.004	0.006	0.048
ESG rating	0.522	0.957	9.284***	-4.134***	0.677	0.385	-0.214
Asset4 environmental	0.281	1.376	10.425***	-4.901***	0.135	0.119	0.720
Asset4 social	-0.996	-0.982	4.167	-6.406***	-1.114	-0.858	-1.367
Asset4 governance	-0.475	0.322	8.822***	-8.681***	0.208	-1.113	-1.611
Asset4 economic	2.229	3.469*	21.680***	-9.294***	2.852	2.299	-0.467
Entrenchment index	0.006	0.009	0.006	0.021	-0.001	0.012	0.018
Analysts	0.258	0.351	0.705	0.788	0.688*	0.108	-0.640

Table 6: Buy-and-hold portfolio returns after completion

The table presents mean buy-and-hold returns for different event windows after the completion of engagements and various subsamples by regions. For each subsample and event window, returns are calculated for the entire subsample, successful and unsuccessful engagements, respectively. The table reports whether the mean is equal to zero and the difference between successful and unsuccessful cases. For differences, one-sided statistics are reported. *, ** and *** indicate significance at the 10%, 5% and 1% level, respectively.

	[0]			[0,6]			[0,12]		
	All	Success	No success	All	Success	No success	All	Success	No success
All cases									
Mean	0.008**	0.012**	0.002	0.013	0.043***	-0.031**	0.018	0.044**	-0.019
Obs	847	509	338	841	503	338	804	471	333
Diff. (t-stat)		1.338*			3.976***			2.346***	
Lowest ESG quartile									
Mean	0.000	-0.002	0.003	-0.010	0.031	-0.043	0.010	0.023	0.000
Obs	176	78	98	176	78	98	170	74	96
Diff. (t-stat)		-0.344			1.829**			0.412	
Highest ESG quartile									
Mean	0.010	0.009	0.016	0.022	0.033	-0.020	0.028	0.036	0.001
Obs	165	131	34	165	131	34	155	122	33
Diff. (t-stat)		-0.462			1.121			0.484	
Reorganization cases									
Mean	0.011**	0.023***	0.002	-0.004	0.036	-0.035**	-0.010	0.011	-0.026
Obs	436	190	246	436	190	246	425	182	243
Diff. (t-stat)		2.191**			2.623***			0.997	
Environmental									
Mean	0.010**	0.018***	0.000	-0.016	0.032	-0.069***	-0.013	0.010	-0.036
Obs	358	190	168	353	185	168	330	167	163
Diff. (t-stat)		1.867**			3.806***			1.240	
Social									
Mean	0.001	0.000	0.002	0.023*	0.040**	-0.003	0.024	0.058**	-0.025
Obs	367	223	144	366	222	144	352	208	144
Diff. (t-stat)		-0.200			1.621*			2.074**	
Governance									
Mean	0.026**	0.029*	0.019	0.069**	0.072**	0.056	0.084*	0.074	0.123
Obs	122	96	26	122	96	26	122	96	26
Diff. (t-stat)		0.319			0.214			-0.474	

Table 7: Excess cumulative abnormal returns at case closure

This table reports cumulative abnormal return statistics for various event windows and subsamples in excess of a matched sample. For each subsample, cumulative abnormal return statistics are reported for three event windows. The beginning of an event window is defined as the month when an engagement case is completed, the end of the window is either the month, when the engagement is completed or 6 or 12 months following completion. The estimation period is 36 months prior to engagement. We use the Fama-French-Carhart model for the estimation of normal returns. Excess abnormal returns are calculated monthly subtracting the returns of an equally weighted portfolio of matched companies. The matching sample is based on Mahalanobis score matching on industry, size, market-to-book, ESG and ROA. For each event window and subsample combination we test whether the mean cumulative abnormal return is 0 and the difference between successful and unsuccessful cases. For differences, we calculate one-sided statistics where the alternative hypothesis is that successful engagements earn larger returns. *, ** and *** indicate significance at the 10%, 5% and 1% level, respectively.

	[0]			[0,6]			[0,12]		
	All	Success	No success	All	Success	No success	All	Success	No success
Full sample									
Mean	0.005*	0.006	0.007	0.027***	0.022*	0.036**	0.019	0.024	0.012
Obs	846	509	337	841	504	337	810	477	333
Difference		0.228			-0.737			0.400	
Reorganization cases									
Mean	0.006	0.011	0.002	0.044***	0.035	0.051***	0.022	0.046	0.005
Obs	435	190	245	435	190	245	424	182	242
Difference		0.912			-0.549			0.914	
Lowest ESG quartile									
Mean	0.006	0.025**	-0.001	0.071***	0.084**	0.060*	0.075**	0.113**	0.045
Obs	176	78	98	176	78	98	172	75	97
Difference		2.488***			0.462			0.921	
Highest ESG quartile									
Mean	0.007	0.002	0.024	0.003	0.004	0.003	-0.006	-0.004	-0.012
Obs	165	131	34	165	131	34	155	122	33
Difference		-1.524			0.022			0.102	
Environmental									
Mean	0.009**	0.005	0.014	0.030**	0.008	0.055**	-0.004	0.001	-0.010
Obs	358	190	168	354	186	168	335	171	164
Difference		-0.887			-1.711			0.237	
Social									
Mean	0	0.007	-0.006	0.015	0.022	0.004	-0.002	0.004	-0.011
Obs	366	223	143	365	222	143	353	210	143
Difference		1.913**			0.654			0.330	
Governance									
Mean	0.011	0.004	0.041	0.057	0.047	0.094	0.144***	0.109**	0.272***
Obs	122	96	26	122	96	26	122	96	26
Difference		-1.098			-0.547			-1.425	

Appendix A: Engagement case examples

Environmental

Amid a changing regulatory environment, the activist hired a third party analyst firm to evaluate the effects of new legislation on utility companies. The activist was specifically interested in the risks associated with the CO2 emissions of energy companies. After assessing the report, the activist reached out to company XXX on March 12, 2009. In a phone call, the activist requested information on two specific issues related to CO2 emissions. First, they were interested in the company's strategy to reach statutory CO2 targets; and second, the strategy regarding the acquisition and construction of new power plants. Following up on the phone call, the activist paid a visit to XXX's headquarters on April 24, 2009, meeting an investor relations officer of the company. At this meeting, the activist elaborated on the requests in more detail, stressing that their ultimate goal was that the company published a sustainability report in response to these requests. The company representative assured the activist that the company was aware of the changing regulatory environment and that they were already working on a sustainability report to appease investors. Following the publication of the report, the activist got back to the company in email on September 18, 2009 requesting more details on future power plants. This was followed by a further email on December 8. Finally, the company fulfilled all request of the activist publishing all information online. After the activist verified the published information, the case was closed as successful on February 25, 2010.

Social

The activist engaged financial institution YYY on March 10, 2006 to acquire more information on human rights policies, following the publication of a BankTrack report in January that indicated that YYY reported less information on the topic than its peers. Specifically, the activist was concerned about the ethical standards of the bank corresponding to investments in Russia and third world countries. The first meeting took place at the activist's offices with an investor relations officer of YYY. This meeting was followed by a conference call on April 6, 2006 during which a YYY executive assured the activist that the bank had nothing to hide. Furthermore, the executive explained that they do take human rights issues into account for project financing and investments, although, as this was part of their internal scoring processes, they did not want to disclose details to maintain their competitive position. In response to the request for more transparency, the YYY executive promised that they would publish a sustainability report for 2006. Following the publication

of the report, engagers had a last meeting on October 26, 2006 with the investor relations officer to go over the details of the report. As the report covered all concerns that the engager previously raised, the case was closed as successful.

Governance

The activist engaged company ZZZ in 2007 concerning the size and composition of the supervisory board of the company. The activist was concerned that the size of the board was not large enough to fully oversee the company's operations. A further concern was that the CEO of the company was also the chairman of the supervisory board. The activist voiced these concerns in collaboration with other investors at the AGM in mid-2007. ZZZ showed willingness to revise its governance practices, however, the CEO remained the chairman of the board. The activist revisited the case in 2008 and 2009 at the AGMs to no avail. Since they could not reach their goal of improving ZZZs corporate governance, they closed the cases as unsuccessful on May 12, 2009.

Appendix B: Engagement topics – detailed

Environmental

Climate Change: Carbon Disclosure Project, Climate Change

Ecosystem Services: Alternative Energy, Biodiversity, Eco-Efficiency; Emissions, Effluents and Waste; Nuclear Power, PVC and Phthalates, Tropical Hardwood, Water

Environmental Management: Environmental Management, Environmental Policy & Performance, Environmental Reporting, Environmental Supply Chain Standards

Social

Human Rights and Ethics: Animal Testing, Anti-Corruption, Customer Satisfaction, Ethics, Fur, Gambling, Human Rights, Military Production and Sales, Pornography and Adult Entertainment Services, Social Supply Chain Standards, Stakeholder Management & Reporting, Sustainability Reporting

Labor Standards: Attraction & Retention, Controversial Regimes, Forced and Compulsory Labor, Human Capital, Labor Standards, Privacy & Freedom of Speech, Third World, Training & Education, UN Global Compact

Public Health: Access to Medication, Alcohol, Genetic Engineering, Healthy Nutrition, Integration in Products, Intensive Farming & Meat Sale, Product Safety, Tobacco

Governance

Corporate Governance: Board Practices, Governance Structure, Remuneration, Shareholder Rights, Supervisory Board

Management and Reporting: Accountability & Transparency, Anti-Corruption, Corporate Strategy, Risk & Crisis-Management, Stakeholder Management & Reporting

Appendix C

Table C1: Variable definitions

This table provides variable definitions. All variables based in \$ terms, if applicable.

Variable	Definition	Source
ESG scores		
ESG score	Equally weighted Asset4 score: based on the Environmental, Social, Governance and Economic pillars (0-100)	Datastream - Asset4
Environmental score	Environmental pillar score: a companys impact on living and non-living natural systems, as well as complete ecosystems (0-100)	
Social score	Social pillar score: a companys ability to generate trust and loyalty with its workforce, customers and society (0-100)	
Governance score	Governance pillar score: a companys systems and practices that ensure that its executives and board act in the interest of (long-term) shareholders (0-100)	
Economic score	Economic pillar score: a companys capacity to generate sustainable growth and returns through the efficient use of its assets and resources (0-100)	
Entrenchment index	Index of entrenchment measures (E-index): poison pill, golden parachute, staggered board, bylaws and lock-ins (0-1)	
Risk and performance		
BHR	Buy-and-hold stock return over 12 months	Datastream
Volatility	Stock return volatility	
Amihud ILLIQ	Amihud illiquidity measure multiplied by \$1 million	
Asset turnover	$(\text{Total sales})/(\text{Total assets})$	
Profit margin	$(\text{Net income})/(\text{Total sales})$	
ROA	$(\text{Net income})/(\text{Total assets})$	
ROE	$(\text{Net income})/(\text{Book value of equity})$	
Sales growth	Year-over-year sales growth	
Sales market share	Percentage of total industry sales	
Market-to-book	$(\text{Market value of equity})/(\text{Book value of equity})$	
Tobin's Q	$(\text{Market value of equity} + \text{Total book liabilities})/(\text{Book value of equity} + \text{Total book liabilities})$	
Cash and expenses		
Cash holding	$(\text{Total cash})/(\text{Total assets})$	Datastream
CapEX	$(\text{Capital Expenditures})/(\text{Total assets})$	
Operating expenses	$(\text{Operating expenses})/(\text{Sales})$	
Size and capital structure		
Log total assets	Natural log of total assets	Datastream
Log sales	Natural log of total sales	
Log market equity	Natural log of total market capitalization	
Book leverage	$(\text{Total book liabilities})/(\text{Total book liabilities} + \text{Book value of equity})$	
Tangibility ratio	$(\text{Plant, property and equipment})/(\text{Total assets})$	

Continued on next page

Variable	Definition	Source
Other		
Dividend yield	(Total dividends paid)/(Market value of equity + Market value of preferred shares)	Datastream
Dividend payout	(Total dividends paid)/(Net income)	
Company age	Years since incorporation or IPO date	I/B/E/S
Analysts	Mean number of analysts issuing earnings (EPS) forecasts annually	
Ownership		
Holding of engager	Portfolio holdings of engager (total)	Morningstar
Toehold	Indicator variable; 1 if the engager increases its holdings prior to targeting	
Toehold increase	Indicator variable; 1 if the engager increases its holdings over the course of targeting	
Average ownership	Mean of ownership stakes	Orbis
Number of blockholders	Number of owners with a +5% stake	
Long-term investors	Holdings by pension and mutual funds	
Hedge funds and PE	Holdings by edge funds, venture capitalists and private equity firms	
Individuals and family	Holdings by individuals and families	
Independent company	Indicator if a company has no majority shareholder with a stake larger than 25%	
Miscellaneous		
Contact number	Number of contacts with the target company	Activist
Contact type	The dominant channel of communication	
Contacted executives	Role of contact person at target company; 1 for executive officers, 0 otherwise	
Geographic FE	Fixed effects for Asia, Europe, North America and Other regions	
Industry FE	Fixed effects for 17 Fama-French industries	
Joint targeting	Targeting in collaboration with other activists; 1 if jointly targeted, 0 otherwise	
Length of sequence	Time span of targeting in days	
Previous engagements	Number of previous cases with the same company	
Success	The originally defined goal is achieved; 1 for success, 0 otherwise	
Success streak	Number of previous successful cases with the same company	
Receptiveness	1 if the target firm is initially willing to collaborate with the activist; 0 otherwise	
Reorganization	1 for material request aimed at changing the company's operations; 0 for an engagement aimed at enhancing transparency	

Appendix D

Table D1: Analysis of targeting by regions

This table reports the marginal effects obtained from probit regressions on the probability of targeting relative to a matched sample. The first two columns report regression results for the whole sample of engagements (1-2), while the second, third and fourth set of columns refer to North American (3-4), European (5-6) and Other domiciled (7-8) companies, respectively. The dependent variable equals 1 if the company is targeted and 0 otherwise. Marginal effects are evaluated at the mean of the respective independent variable. Standard errors are clustered at the firm level. The matching sample is determined by Mahalanobis score matching on industry, size, market-to-book, ESG and ROA. Variable definitions are provided in the Appendix. *, ** and *** indicate statistical significance at the 10%, 5% and 1% level, respectively.

	Full sample		North America		Europe		Other	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Log total assets	-0.033***	-0.009	0.024	0.027	-0.082***	-0.058***	0.033**	0.071***
Tobin's Q	-0.008	-0.001	0.016	0.010	-0.027*	-0.009	0.019	-0.005
Sales growth	0	-0.045	-0.196**	-0.153*	0.034	0.045	0.101	-0.035
BHR over 12 months	0.084***	0.114***	-0.034	-0.036	0.088***	0.143***	0.092**	0.068
ROA	0.146	0.034	1.027**	0.928**	-0.034	-0.245	0.092	-0.017
Sales market share	3.838***	3.453***	3.015***	2.386**	4.318***	3.953***	1.228	0.099
Cash holding	-0.005	0.050	0.285	0.194	-0.074	-0.080	-0.426*	-0.349
Book leverage	0.018	0.036	0.184*	0.150	-0.039	-0.002	-0.087	-0.310**
Dividend yield	0.600	1.451**	-0.345	0.261	0.901	1.725**	0.637	1.617*
CapEX	0.014	-0.020	-0.325	-0.390	-0.449	-0.468	0.842**	0.844*
Amihud ILLIQ	0	-0.354*	-0.035	-136.388***	0.001	-0.140	0	-0.906
Analysts	0.013***	0.016***	0.003	0	0.022***	0.023***	-0.008***	-0.001
Previous engagements	-0.014	-0.019**	-0.016	-0.026	-0.015	-0.017*	-0.005	-0.020
Holding of engager Independent company yes=1		4.276		8.161**		5.428**		18.180
		0.032		0.068		0.037		0.050
Entrenchment index		-0.023		0.158*		-0.096		-0.297***
ESG score		-0.103*		0.025		-0.083		-0.079
Year FE	yes	yes	yes	yes	yes	yes	yes	yes
Industry FE	yes	yes	yes	yes	yes	yes	yes	yes
Geographic FE	yes	yes	no	no	no	no	no	no
Pseudo R2	0.10	0.18	0.09	0.25	0.22	0.28	0.06	0.24
N	3,174	2,478	776	641	1,722	1,501	676	319

Table D2: Analysis of success by regions

This table reports the marginal effects obtained from linear probability regressions on the probability of success. The dependent variable equals 1 if the engagement is successful and 0 otherwise. The first two columns report regression results for the whole sample of engagements (1-2), while the second, third and fourth set of columns refer to North American (3-4), European (5-6) and Other domiciled (7-8) companies, respectively. Standard errors are clustered at the firm level. The dummy "Reorganization" takes the value 1 for reorganization cases and 0 otherwise. The dummy variable "Collaboration" equals one for cases where the engager contacts the company with other activists. The variable "Contacted executives" is 1 if executive management is contacted and 0 otherwise. "Number of activities" and "Success streak" refer to the number of contacts per case and the number of previous successful cases with the company. Other variable definitions are provided in the Appendix. *, ** and *** indicate statistical significance at the 10%, 5% and 1% level, respectively.

	Full sample		North America		Europe		Other	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Reorganization	-0.170***	-0.159***	-0.284*	-0.231	-0.162***	-0.138**	0.222	-0.067
Joint targeting	0.043	0.030	0.275**	0.218	-0.023	-0.025	-0.107	-0.245
Contacted executives	-0.05	-0.040	-0.174	-0.216	0.053	0.038	-0.235*	0.292
Number of activities	0.005	0.005	-0.001	-0.003	0.012*	0.011	0.017	0.074
Success streak	0.031**	0.021*	0.080	0.021	0.017	0.013	0.092	0.117
Log total assets	0.021	-0.053**	-0.029	-0.120***	0.019	-0.012	0.085***	0.047
Tobin's Q	-0.005	-0.019	0.026	-0.001	-0.011	-0.013	-0.019	-0.215**
Sales growth	-0.244***	-0.353***	-0.083	0.016	-0.410***	-0.442***	0.033	0.255
BHR over 12 months	-0.007	-0.048	0.187*	0.236**	-0.124*	-0.219***	0.008	-0.135
ROA	-0.16	-0.314	-0.776	-1.713*	0.307	0.321	1.157	-1.175
Sales market share	1.134	1.906**	2.026	1.954	0.772	0.65	-0.309	-4.341
Cash holding	-0.225	-0.723**	-0.676	-1.010**	-0.349	-0.731*	0.436	1.889
Book leverage	0.054	-0.089	-0.283	-0.455**	0.13	0.065	0.213	-0.255
Dividend yield	-0.53	0.295	0.576	4.387**	-1.177	-1.317	-1.118	-0.515
CapEX	-0.213	0.322	1.236	2.217**	-0.804	-0.645	0.666	0.523
Amihud ILLIQ	0.007	0.389	0.093***	-152.027***	0.067*	0.258	-0.021	0.541
Analysts	0.001	-0.001	-0.001	0	0.003	-0.001	-0.004	-0.028
Initial holding jump		0.007		0.008		-0.003		0.084
Holding increase		-0.014		-0.033		0.045		0.148
Independent company		0.076		0.087		0.004		-0.076
Entrenchment index		0.020		-0.044		0.152		-0.163
ESG rating		0.448***		0.586**		0.237		1.031*
Year FE	yes	yes	yes	yes	yes	yes	yes	yes
Geographic FE	yes	yes	no	no	no	no	no	no
Industry FE	yes	yes	no	no	no	no	no	no
Adjusted R2	0.2	0.22	0.16	0.23	0.23	0.22	0.17	0.11
N	784	577	192	166	433	360	159	51