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Coordinated Engagements*

Elroy Dimson[a], Oğuzhan Karakaş[a] and Xi Li[a,b]

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[a] Centre for Endowment Asset Management, Judge Business School, University of Cambridge, Trumpington Street, Cambridge CB2 1AG, U.K.; telephone +44 (0)1223 339700; email e.dimson@jbs.cam.ac.uk, o.karakas@jbs.cam.ac.uk.

[b] London School of Economics and Political Science, Houghton Street, London WC2A 2AE, U.K.; telephone +44 (0)20 7405 7686; email xi.li@lse.ac.uk.

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Abstract: We study the nature and benefits of coordinated engagements by activist shareholders cooperating to influence firms on environmental and social issues. Our sample includes 1,671 collaborative dialogues by 225 investment organizations from 24 countries, targeting 964 listed companies in 63 countries over 2007-2017. The target firms are large and in distinctive sectors. Success rates are elevated by having a lead investor that is domestic, and having international activists that are more numerous, influential, and exposed to the target company. Successful engagements are followed by improved profitability, sales growth, and increased ownership by lead investors. Unsuccessful engagements do not experience improvements.

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

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Coordinated Engagements

In December 2016 the California Public Employees Retirement System, the largest US public pension fund with assets over $300 billion, discussed whether to reverse its tobacco-free investment policy; CalPERS' board decided to maintain and extend the tobacco restriction to all externally managed funds (Payne (2016)). In November 2017 the Norwegian Government Pension Fund, the world's largest sovereign wealth fund with assets over $900 billion, received a recommendation from. Norway's central bank to dispose of the Fund's entire shareholding in oil and gas companies (Berglund (2017)). These and many other recent policy changes are an outcome from coordinated action by multiple activists seeking to influence financial institutions. Environmental and social (E&S) activists are a growing power in the institutional investment world, and the pressures are increasingly global. Yet initiatives on E&S issues are still underpinned by sentiment, rather than supported by evidence.

Almost a decade ago, a paper on the role of collaboration in achieving social objectives reported that "*The lack of a conclusive business case for corporate social responsibility (CSR) is at the heart of the ongoing debate over the role of business in solving social and environmental problems"* (Peloza and Falkenberg (2009)). The absence of a business case reflects not only of a lack of evidence, but also the fact that we do not know which interventions are more likely effective. As the authors explain, "*Although the link between CSR activities and firm financial performance is still debated, research suggests that the relationship depends, at least in part, on how the CSR initiative is executed*" (ibid). The knowledge gap about how to intervene with a target company is almost as large today as it was a decade ago.

This paper examines engagements by asset owners and investment managers on CSR issues. It is the first to study coordinated, collaborative and international efforts to influence investee companies on environmental and social issues. We address questions such as: What factors influence investment institutions to engage with target companies? Are collaborative actions more effective and does coordination with other stakeholders improve the outcome? What is the best approach to collective action for these projects? Does activist size and

shareholding influence the targeting and success of engagements? Our answers to these questions are based on careful analysis of a detailed record of cooperative engagements by institutional investors. In particular, we study the strategy, success rates and financial outcomes of activist shareholders who coordinate their engagements through the Collaboration Platform provided by the Principles for Responsible Investing (PRI). Founded in 2006 and supported by the United Nations, PRI has become the leading network for investors with a commitment to responsible ownership and long-term, sustainable returns.

The PRI Collaboration Platform data have various desirable attributes for research. First, engagements are logged in a platform provided by a third party, and cannot be revised retrospectively by an organization involved in the study. Second, each engagement is supported by multiple asset owners, investment managers, and service providers, which strengthens the potential validity of the research relative to a study focusing on a single investor. Third, the dataset is truly global, embracing investors, managers, advisors and NGOs from many countries. Finally, there is a dated record for each engagement, and there is no need to rely on scores or ratings from ESG advisory firms. To our knowledge, the PRI Collaboration Platform is the only source of global data that meets these criteria.

The focus of our study is engagements that emphasize E&S concerns, and we investigate the determinants of targeting, success and the benefits from coordinated action by investors. Our dataset is comprehensive, and runs from PRI's first collaborative engagement in 2007 to mid-2017. The study examines 1,671 engagement sequences undertaken by 225 investment organizations (including investment managers, asset owners, and service providers) from 24 countries, targeting 964 listed companies located in 63 countries. The success rate for engagements in our overall sample is 42%; the probability of achieving success in environmental themes is lower (33%) while for social themes it is higher (60%). The average and median elapsed times from initial engagement to success are around two years. Companies targeted for engagement are most frequently in the manufacturing sector, followed by the infrastructure, wholesale & retail trade, and mining sectors. Targeted companies are most frequently located in the United States, United Kingdom, France and Japan.

We compare targeted companies with their peers from the same country and industry sector in the year before

they were engaged on. We find that coordinated activists target firms that are relatively large, and have a growth rate that is low in relation to their peers. These firms experience low raw stock returns and high return on assets (ROA). They have low capital and R&D investment levels and high institutional ownership. We also show that, in collaborative engagements, leadership is decisive. Success rates are elevated by about one-third when there is a lead investor who heads the dialogue, especially when that investor is located in the same geographic region as the targeted firm. In addition to the importance of leadership, our results suggest that investor influence is also crucial. Success rates are higher when activist investors are more numerous, have larger assets under management (AUM) and own a bigger proportion of the target company. These investor attributes are especially important when investors are engaging across national boundaries and are investment managers (as opposed to asset owner or service provider). After engagements have concluded successfully, target companies experience an improved ROA, increased sales growth, and increased ownership by the lead investor. This contrasts with unsuccessful engagements, which are not followed by any change in ROA, sales growth, or in shareholding.

Since the objectives of the activity are achieved in a substantial proportion of the engagements, we conclude that coordinated activism on E&S issues improves social welfare. Furthermore, this activism is value enhancing, since it improves firm performance when engagements are successful and does not impair firm performance even when engagements are unsuccessful. Our evidence suggests that, for maximum effect, coordinated engagements should preferably have a lead investor that is well suited linguistically, culturally and socially to influencing target companies. Supporting investors are also crucial, and they should ideally be major investment managers who have influence because of their scale, ownership and geographic breadth.

Our paper makes new contributions on three dimensions. First, to our knowledge this is the only research paper examining the nature and impact of internationally coordinated engagements on E&S issues. Second, by avoiding the data and methodological limitations that afflict many CSR studies, we add reliable additional evidence on the link between responsible investing and financial performance. Finally, our paper extends the substantial literature on shareholder activism and corporate governance.

Section 1 discusses the institutional background and the related literature, and summarizes the main questions we ask in this paper. In Section 2, we describe our engagements dataset that we use to answer these questions. In Section 3, we report our analysis and results. In Section 4, we present our conclusions. Appendix A provides brief case studies that illustrate the nature of engagement coordinated through the PRI Platform. Appendix B provides the definitions and sources of variables in our analyses.

1. Institutional Background and Literature

A large proportion of asset owners and investment managers now express commitment to being responsible by signing up to the United Nations sponsored Principles for Responsible Investment (UNPRI.org). At the time of writing, PRI has over 1,750 signatories from 50+ countries, representing some $70 trillion in assets. The value of worldwide assets that are managed according to responsible investment criteria is estimated by the Global Investment Sustainable Alliance (GSI-Alliance.org) to be $23 trillion. Moreover, non-profit organizations such as Inclusive Capitalism (Inc-Cap.com) and Focusing Capital on the Long Term (FCLTglobal.org) aim to engage business, government and civil society leaders in making capitalism more sustainable and inclusive, and to encourage responsible behavior among a membership that includes leading investment managers, asset owners, corporations and advisors.

There are, however, major gaps in academic work on active ownership and investor engagement. Most published research fails even to indicate whether investors who pursue a responsible E&S approach can anticipate an enhanced or an impaired return, even over the very long run. One exception is Dimson, Karakaş and Li (2015), a study that examined 2,152 engagements by a single investment firm with US target companies. The study reported that successful engagements were followed by positive abnormal returns, improved performance and governance, and increased institutional ownership, while unsuccessful engagements generate zero returns. However, Dimson, Karakaş and Li (2015) examined—albeit in great detail—the record of just one investment organization in a single country. A natural question is how representative might this investor be? A brief glance at extant studies of shareholder activism (Panel A of Table 1) indicates that most prior

research on E&S engagement has had limited exposure to non-US, non-UK markets. Predominantly, research has been clinical in nature, drawing on the experience of a single asset owner or a single investment manager. Research studies have had a profound home bias. Typically, they have examined activism emanating from the US or UK, and have reflected the location of the activist who provided the engagement data. Yet most institutional investors hold financial assets that are distributed around the world. Many observers believe that developing countries—like the developed world—should encourage their corporations to be socially responsible, and there is a growing conviction that the biggest challenges confronting active owners are of truly global relevance.

Insert Table 1 about here

It is of course arithmetically impossible for all investors to adopt a strategy that beats the market (Sharpe (1991)). But can other investors *who are willing to dedicate the necessary resources* engage profitably with investee businesses? This is challenging to investigate because of the concern that investment businesses are more likely to share their historical data if they think their approach will be vindicated by researchers. They are less likely to make available their retrospective data if they suspect the results may reveal incompetence or prolonged bad luck. In other words, there is a danger that corporate records of investment behavior may be non-typical—that they may be subject to a subtle but non-negligible degree of bias. The tendency to discover spuriously favorable investment returns, which appear significant in-sample but cannot reliably be extrapolated to out-of-sample conditions, is often attributed to p-hacking (Harvey (2017)).

Our motivation, however, is more akin to mitigating easy-data bias. Easy-data bias—over-reliance on data that is straightforward to access—arises in the context of mutual fund performance measurement when there is a focus on analyzing a long historical record. The dataset is consequently likely to comprise funds that, with hindsight, achieved favorable returns. Samples chosen (possibly unwittingly) because of their past success are estimated to have their returns overstated by as much as 0.9% per year (Elton, Gruber and Blake (1996)). Easy-data bias also afflicts historical studies of the realized equity premium, and use of readily available stock market data—omitting periods (such as wartime) when index computations were challenging—is estimated to

have spuriously doubled historical estimates of the equity risk premium (Dimson, Marsh and Staunton (2002)).

Research on the reward to following a long-term investment philosophy is also exposed to potential bias. One widely-cited study estimates the performance over 2001–2015 of companies with a long-term orientation. However, the sample is chosen with hindsight to include surviving businesses with uninterrupted results and which—if previously small—managed to grow in value to over $5 billion during the sample period (Barton, Manyika and Williamson (2017)). These screening criteria give rise to success bias, and the resulting tilt in the sample towards companies that, with hindsight, were known to be successful can undermine the out-of-sample reliability of empirical studies.

Hopefully, the rewards to ESG (environmental, social, and governance) investing documented by prior literature (Table 1) are unlikely to suffer such marked misestimation.[1] However, there is a need to undertake a *prospective* study, in which data contributors have no say over whether their engagement data is made available to researchers. Our research is the first to examine not only E&S activism by multiple investors, but to investigate a dataset that is immune to such hindsight and success bias.

There are several questions that are important to both researchers on E&S issues and investment professionals. In this paper, we address the following:

1.1 Shareholder activism vs. social activism?

Many scholars and practitioners perceive a conflict between different types of activism. Shareholder activism generally addresses conflicts between managers and shareholders, and seeks to create value for shareholders. Barber (2007, p.66) asserts that "*portfolio managers… can also abuse their position by pursuing actions that advance their own moral values or political interests at the expense of investors (social activism)"* (parentheses in original). This raises the question as to whether it is on average value impairing to address environmental

[1] Throughout the paper, following Dimson, Karakaş and Li (2015), we focus on E&S engagements. In our dataset, similar to Dimson, Karakaş and Li (2015), many of the engagements in the governance area (e.g., anti-corruption engagements) are also inherently linked to the environmental and social areas. See Table 2 for further details on engagement areas, themes and issues.

and social issues, or whether such social activism is on average value enhancing. We provide evidence on this question.

Servaes and Tamayo (2017) discuss the role of social capital in corporations by reviewing the related literature, and argue that social capital is likely to improve the firm value. Using CSR performance as a proxy for social capital (i.e., for trust between shareholders and managers), and shareholder governance proposals for shareholder activism, Dimitrov and Gao (2017) argue that shareholders of firms with higher CSR scores play a constructive role in their activism on corporate governance.

1.2 Solo or collaborative engagements?

A detailed clinical study of activism was undertaken by Carleton, Nelson and Weisbach (1998). They gained access to as complete a collection as possible of engagement correspondence during 1992–1996 between the Teachers Insurance Annuity Association—College Retirement Equities Fund (TIAA) and various target companies. The correspondence provided the first "large sample" (45 firms) of private negotiations; in most cases TIAA was able to reach agreement with their targets to implement the requested changes. The fact that TIAA negotiated with the target almost never became public knowledge, and it seems that these solo negotiations were very successful in inducing change. While some initiatives may best be conducted in privacy by a single asset owner, this raises the question of whether a broader collaborative engagement may be superior. Although other papers such as Smith's (1996) study of California Public Employees' Retirement System's (CalPERS) engagements included negotiated agreements, they are less informative about the nature of these private agreements. In our study, we have been given complete access to the files associated with each engagement.

There are significant benefits associated with collaborative engagements. First and foremost, by pooling resources and influence together, investors are able to achieve higher success via louder voice and larger voting power. Gillan and Starks (2000) find that shareholder proposals on corporate governance issues, sponsored by coordinated groups, gain substantially more support than those sponsored by individuals. Dimson, Karakaş and Li (2015) find that collaboration with other shareholders and/or stakeholders significantly improves the

success rate of engagements, especially those in the environmental and social areas. Second, engaging as a coordinated group also improves engagement efficiency, by borrowing expertise from investors in the group who are more equipped with the knowledge of a particular issue or target company, and by sharing the costs of research. This is especially efficient for smaller investors who are resource-constrained to afford an in-house engagement team. Third, collaboration in ESG engagements enables better risk sharing among the active owners. However, collaborative engagements also face many challenges. First, the free-riding problem is prominent. The costs might be borne by a small group of committed and resourceful investors, while the benefits are shared by all investors in the group. Second, coordination is difficult and time-consuming. Investors may face different objectives and interests, so to achieve agreement among a large number of investors from diverse geographic and cultural backgrounds may prolong the process. The delayed action may reduce the effectiveness of engagements on issues that are time sensitive. Third, there is a potential regulatory barrier in certain markets for investors behave as a concert party. We argue in the next section that having a third-party, such as the PRI Clearing House team, to coordinate the engagements can substantially overcome these challenges.

Studying a sample of international hedge fund activism, Becht et al. (2017a) report that engagements by multiple activists perform better than engagements by single activists. Analyzing private engagements on corporate governance issues by an investor collective action organization (ICAO) in Canada, Canadian Coalition for Good Governance (CCGG), Doidge et al. (2017) find evidence for collective actions of activist institutions increasing the success of their engagements (e.g., target firms are more likely to adopt corporate governance reforms in majority voting, say-on-pay, and compensation structure areas, and stock market reaction to such changes are more favorable). Consistent with our findings, Doidge et al. document that CCGG is more likely to target large firms in which the collective voting power is higher.

1.3 Heavy or light-touch?

Collaboration between investors is particularly challenging and requires effective commitment mechanisms while not falling foul of restrictions on concert-party activities. A coordinated group of institutional investors,

potentially including both index investors and active managers, can provide the necessary commitment mechanism. Long-horizon investors can be motivated by their universal-ownership, which can transform competition between investment managers and asset owners and can alleviate the free-rider dilemma that might otherwise impede coordinated engagements with investee companies. Starks, Venkat and Zhu (2017) provide evidence that long-horizon investors prefer firms with better ESG practices. These long-horizon investors are likely to be large. The question of whether major asset owners are better able to influence target companies is an empirical issue. Our paper includes a very large number of these investors, together with information on their size and shareholdings, so this is also a question we address.

Bebchuk et al. (2017) analyze the cooperation between activists and target firms, and find that a settlement is more likely when an activist has a credible threat to obtain a board seat in a proxy fight. These findings of Bebchuk et al. resonate with ours, illustrating that the chances of success in E&S engagements increase with investor influence which, in our study, is proxied by the number of investors, assets under management, and holdings in the target.

Dyck et al. (2017) find evidence that institutional investors demand stronger E&S performance from the firms in which they invest globally, and both financial and cultural/social aspects play an important role in the actions of institutional investors. This is in line with Hart and Zingales (2017) arguing that asset managers should invest according to the preferences of their investors.

2. Data

Our dataset is drawn from PRI's initiative to support investor engagements on ESG issues with corporations. PRI aims to be "*an enabling organization that may help to overcome barriers to collective action by providing an infrastructure for investors to work with one another, and through maintaining time-continuity of investors' engagement, thus resulting in continued pressure on targeted firms*" (Gond and Piani (2012)). Shortly after the Principles were launched in 2005, the PRI Collaboration Platform (then known as the PRI Clearinghouse)

was initiated as a forum for shareholder engagement and as a vehicle for alliances among institutional investors and their advisors. This facility rapidly became the world's largest platform for coordinated engagement activities, and by 2017, PRI reported that over 500 signatories had been involved in at least one collaborative initiative and more than 700 collaborative proposals had been posted on the Platform.

2.1 Engagements coordinated by PRI

Posts to the Collaboration Platform vary in their intensity and resource requirements. Some are demanding, such as proposals for in-depth research, opportunities to participate in investor-company engagements, and requests to join in policy and regulatory dialogue. Other posts may be simpler, such as requests to co-sign letters to companies, or to support imminent shareholder resolutions. The PRI Executive actively coordinates a number of collaborative engagements with listed companies worldwide, provides administrative support to investor coalitions, and facilitates web-based virtual meetings and other facilities to support investor initiatives. The Platform can also be used by signatories for direct collaboration that bypasses the PRI Secretariat.

For the purpose of this study, we focus on the engagement projects initiated and coordinated by PRI. Having PRI Clearing House as a third party to coordinate ESG engagements substantially reduces the costs associated with collaborative engagements. First, the PRI clearing house has a team of experts with background in areas associated with environmental and social issues. They proactively identify issues and invite institutions to participate and cooperate on its platform. After several years' experience of working together, PRI found it helpful to identify one or more lead investors to drive forward an initiative, with a larger number of supporting investors providing more limited resources. Such an engagement structure reduces free-riding problem as the costs of coordination and research are born by PRI, which is sponsored by a fixed fee paid by all signatories, not any individual investors. Second, PRI and its signatories work with local regulators and policy makers to seek clarification on issues with uncertainty. In some markets (e.g., European Union and South Africa), investors "acting in concert" is securitized by anti-trust regulators. Although such legislation is not primarily targeting collaborative engagements on ESG issues, there exists regulatory ambiguity and uncertainty. PRI's

team and its investors have sought clarification on such issue.[2] It is intriguing that all this organization has led to a structure that bears some resemblance to private equity. Kaplan and Strömberg (2009) explain that private equity funds are organized as "*partnerships in which the general partners manage the fund and the limited partners provide most of the capital. The limited partners typically include institutional investors, such as corporate and public pension funds, endowments, and insurance companies, as well as wealthy individuals. The private equity firm serves as the fund's general partner.*" PRI and its signatories have similarly concluded that it is desirable to identify participants as *leading organization(s)* (signatories who posted the invitation and/or committed significant time and resources) or as *supporting organizations* (signatories supporting the initiative by lending their names and allocating more limited resources). [3]

PRI maintains the Collaboration Platform database and monitors the progress of each initiative. We have been provided with detailed records on every initiative, together with a record of whether each engagement was successful. The evaluation of success varies from project to project and from firm to firm within each project. PRI keeps a record of objective targets for the measurement of success. This could be an at least target level improvement on the scores/criteria of anti-corruption, labor standards, gender equality, human rights etc.; reaching a target in carbon emissions; starting environmental disclosure and action; or becoming active through signing up to certain initiatives such as communication on progress (COP) by UN Global Compact (UNGC).[4] For the majority of engagement projects, PRI hired and/or collaborated with outside party, such as CDP[5], to evaluate whether the stated engagement goals have been achieved.

Engagements are grouped into 31 projects in four broad areas: Environmental, Governance, Social, and

[2] In the UK, the Financial Conduct Authority has clarified in its code of conduct that conversations between investors are not acting in concert. Therefore, UK is a more permissive regime for inter-shareholder dialogue regarding investee companies. In the US, investors informally act at an issue without disclosure may be regarded as a violation of Regulation Fair Disclosure (FD).

[3] See Piani (2013) for further details regarding the PRI's engagement principles, process, and targets, and also for featured case studies on carbon disclosure, ESG communication/disclosure, anti-corruption, and supply-chain issues.

[4] https://www.unglobalcompact.org/participation/report/cop

[5] https://www.cdp.net

(reflecting the United Nations origins of PRI) work related to the UNGC and its sustainable development goals (SDGs). Projects have a limited life, and if the issues raised by a sequence of engagements persist or expand, a "Phase 1" project can be followed by a "Phase 2" project addressing related matters. Appendix A provides several examples of the PRI-coordinated projects and how success is evaluated in each project. The unit of analysis in this study is an engagement sequence level, defined as one target firm engaged in a project. Engagement sequence starting and ending dates are defined as project dates. Our dataset covers the engagements started as early as January 2007. Out of these 31 projects, six are still ongoing at the time of this study. Therefore, their success cannot be evaluated or was evaluated using interim reports. In total, PRI is able to evaluate the success of 1,083 engagement sequences.

Insert Table 2 about here

Table 2 summarizes these projects and also lists how success is measured for each project. For each project, the success is evaluated internally by a member of PRI Clearing House team using either scorecard approach or to assess whether the stated objective of the engagement is achieved. In the scorecard approach, success is often recorded when post-engagement score is significantly higher than the pre-engagement score (e.g., a 10% increase). The success rate (for those engagements where success has been evaluated) listed in Table 2 ranges from 0% (Forest Footprint Disclosure 2012) to 92.3% (Palm oil growers). A reason for the low success rates in Forest Footprint Disclosure projects is that target firms lack the data and information to form the reporting frame at the time of the project completion. For the Palm Oil projects, although they are still on-going, an interim evaluation was conducted in mid-2016 for the growers project.[6] A reason for high success rate is that companies operating upstream (producers, processors and traders) were more likely to have a commitment than those operating downstream in this industry.

Table 3 provides an overview of the distribution of engagements across the major areas, the average success

[6] Success is evaluated based on scorecards prepared for each target firm in pre- and post-engagement periods. The scorecards cover areas from policy and strategy, implementation, and disclosure of sustainably palm oil production. Success is recorded when there is an increased score after engagement.

rates within each area, and the time taken from initiating engagement until success (or a lack of success) has been recorded. The mean and median engagement periods for successful engagements are about two years, whereas such periods for unsuccessful engagements are about a year-and-a-half and year, respectively. Among the successful engagements, engagements on social area have the longest period for success (about four years). Among the unsuccessful engagements, engagements on environment area have the quickest resolution.

Insert Table 3 about here

The PRI Collaboration Platform data have four desirable attributes for research. First, engagements are logged in a platform provided by a third party, and cannot be revised retrospectively by an organization involved in the study. Second, each engagement is supported by multiple asset owners, investment managers, and service providers, which strengthens the potential validity of the research relative to a study focusing on a single investor. Third, the dataset is truly global, embracing investors, managers, advisors and NGOs from many countries, and provides an opportunity to see whether US/UK findings are applicable in other environments. Finally, there is a dated record for each engagement, and there is no need to rely on scores or ratings from ESG advisory firms. To our knowledge, the PRI Collaboration Platform is the only source of global data that meets these criteria.

The new dataset used in this study has been assembled by us in a careful and painstaking collaboration with PRI, and has not been analyzed previously. We do not rely on static and delimited measures for CSR performance, such as third-party ESG scores (see Ferrell, Liang and Renneboog (2016)), and we avoid "company insiders' self-reported impressions" (Margolis, Elfenbein and Walsh (2009)). We respond to Edmans' (2012, 2017) challenge that all prior work fails to address the impact of responsible investing on long-run, risk-adjusted investment performance. Our detailed data enables us to provide new insights on engagement by asset owners with the firms they own around the world.

2.2 Firm-level observations

To understand the characteristics of the target companies, we merge our dataset with WorldScope/Compustat Global and North America using ISIN and company name. We require market capitalization information in the fiscal year before engagement sequence starting date. This reduces our sample size from 1,806 engagements to 1,671 engagements. Using this marginally reduced sample of companies, Table 4 examines the composition of engaged businesses according to several attributes. As can be seen in Panel A of Table 4, PRI coordinated engagements are heavily in the manufacturing sector, followed by infrastructure and wholesale/retail trade. This resembles the distribution across industries reported in Dimson, Karakaş and Li (2015) for a single investor's engagements in US, whose most frequent engagements were in manufacturing, followed by financial and then wholesale/retail trade. Apart from agriculture, for which there are very few initiatives, PRI-facilitated engagements in an industry group are targeted at companies located in at least 12 and up to 52 unique countries, depending on the industry (see right-hand column of Panel A of Table 4). This international range of engagements testifies to the global role of PRI.

Insert Table 4 about here

Flammer, Hong and Minor (2016) examine the integration of CSR criteria in executive compensation (CSR contracting) over 2004-2013, and find evidence for better alignment of interest between shareholders' and managers' preferences for stakeholder engagement. They document CSR contracting to be more prevalent in emission-intensive industries and to become more prevalent over time. They further find that the adoption of CSR contracting leads to a reduction in short-termism, a rise in firm value, and an increase in E&S performance/innovations. Comparing the success rates of engagements in our sample (Panel A of Table 4) with the CSR contracting across industries in Flammer, Hong and Minor (2016, Table 2), we observe a positive correlation (though noting that their data are US based while ours are international). This is consistent under the assumption that international contracting correlates with US contracting, with firms willing to adopt the ESG changes/recommendations given to them with the correct incentives for the managers.

The geographic dispersion of collaborative engagements is further highlighted by the distribution of engagements in different regions around the world. In contrast to the Anglo-Saxon dominated studies reviewed earlier in Table 1, more than three-quarters of engagements involve countries other than the US and the UK. Panel B of Table 4 shows that more than half of engagements take place in Developed Europe (excluding UK) and in Emerging Markets. This further differentiates our global study from single-market investigations of shareholder engagement. A more granular look at the countries covered by the Collaboration Platform confirms the worldwide focus of PRI signatories. Regarding the success rates of engagements among regions, Developed Europe (excluding UK), and UK have the highest success percentages (around 50%), whereas Emerging and Frontier markets have the lowest success percentages (33%). Regarding the success rates of engagements among countries, Netherlands, Switzerland, and Australia have the highest success rates (71%, 62%, and 61%, respectively), whereas Japan, China, and India have the lowest success rates (29%, 27%, and 22%, respectively).

Panel C of Table 4 reports that there are over 100 engagement sequences in each of the United States, France and United Kingdom. There are 50–100 engagement sequences in Japan, Germany, Canada, India, Spain, Brazil and Italy. There are 30–50 engagement sequences in Australia, South Korea, Switzerland, Sweden, China, South Africa, Netherlands and Pakistan. There are 180 engagement sequences in the next 10 countries ranked by number of interactions, and a smaller number of engagements in the least-represented countries that have been targeted by PRI signatories.

The panels of Table 4 report not only the total number of engagements for our whole sample, but also for the subsamples of environmental, social, governance and reporting-related (UNGC) initiatives. The univariate results reported there suggest that the more developed the country, the greater is the likelihood of these engagements being initiated and successful.

3. Analysis

The PRI Collaboration Platform exists to facilitate investor engagement with target companies, and potentially with regulators and other actors in the business world. The companies that are targeted for shareholder activism are selected by signatories. As the PRI explains, "*Typically, engagement begins when one or more investors identifies an issue or specific ESG risk relating to a particular company or sector, and does some initial research to determine whether there is a business case for the company to take steps to respond. The investor may then decide they'd like to engage, and perhaps reach out to colleagues and peers to gauge interest in engaging collaboratively*" (Piani (2013), p.8). It is even possible for non-signatories to trigger new initiatives, though, after one year of involvement, they will normally be invited to sign up to PRI. The process of identifying target companies is bottom-up and is open to all members.

To characterize the firms targeted by PRI's projects, we compare them with their country and industry peers in the pre-engagement year. We create the pool of peer firms using WorldScope/Compustat Global and North America universe. Following Dimson, Karakaş and Li (2015), we remove all the target companies from the pool and require both the target and the control firms to have data on country of incorporation, industry, and market capitalization. To form the peer group, for each target firm, we calculate the average firm's characteristics in the same calendar year (i.e. the fiscal year before the engagement starting year). The average firms are drawn from the same country and industry (3-digit SIC); if there are fewer than three other firms from the same country and 3-digit SIC, we relax the industry classification to 2-digit SIC. If there are more than 10 control firms for each target, we keep only the 10 with closest market capitalization. We then calculate the difference between the target firm and the average firm.

3.1 Characteristics of engagement target

In Table 5, we report the characteristics of companies targeted for engagement, and the difference between target companies and matched peer firms averaged across the target sample. The difference is computed as follows:

$$Diff_i = X_i - \sum X_j / m$$

where X_i is defined as a characteristic variable and the summation $\sum$ is over firms j =1,…,m from the matching group. The number of observations varies slightly due to the non-availability of data to calculate company characteristics.

Insert Table 5 about here

Table 5 reports the attributes of the sample companies. Some of the attributes that we note are the following. First, target firms are more likely to be targeted by coordinated engagements with relatively large institutional ownership. The information on institutional ownership is obtained from FactSet using target firms' ISIN. As can be seen in the table, such ownership information involves a variety of categories of shareholders, including pension funds and mutual funds. Second, compared to the average firm in the peer group, target companies tend to have a lower volatile stock price, and a higher market capitalization, suggesting PRI targets the largest firms in their respective country and industry. Third, target firms tend to have lower stock return in the past year, but higher return on assets. Next, target firms have lower cash holdings and lower capital expenditures. Lastly, engaged firms are more likely to be targeted if their shares trade not only in their home market but also through an American depositary receipt (ADR). ADRs are denominated and pay dividends in dollars and may be traded like regular US securities on US markets. Examples of the target firms include First Resources (Singapore), Empresas COPEC S.A. (Chile), Lukoil (Russia), HSBC (UK), Petrochina (China), Microsoft (US), Nestle (Switzerland), EDF (France).

The target-firm attributes presented in Table 5 suggest that engagement collaborators tend to target more mature and larger firms, where there is higher institutional ownership and lower insider ownership, compared to control firms. This can strengthen the power of the engagers' "voice", reflecting both the activists' scale and the reputational concerns of the target. The higher institutional ownership also indicates activists who have greater voting rights and better alignment of (cash flow) interests than in the control sample. The lower insider ownership indicates the potential for lower entrenchment by the target management, and lower resistance to proposed advancements in responsible behavior. We also extend this analysis to ESG ratings, obtained from Sustainalytics. Firms with a high overall rating for ESG are more likely to be targeted. This is consistent with

PRI's proactive approach to identify potential issues in an industry or region rather than to re-actively fix arising ESG problems.

Insert Table 6 about here

We conduct a multivariate analysis of targeting the companies for ESG engagements by using a probit regression model. The dependent variable is *D_Target*, defined as one for target firm and zero for an average firm in the peer group. Table 6 reports the marginal effects of the probit regression coefficients. In these models, we control for year fixed effects, and standard errors are clustered at the target firm level. The findings are largely consistent with those in the univariate analysis with a few exceptions. The coefficient on ADR has a negative sign in columns (1) and (3), suggesting that ADR firms are less likely to be targeted. The opposite finding could be due to the fact that size is controlled in the regressions and ADR firms tend to be larger in size. The coefficient on insider ownership becomes insignificant in most of the regressions, potentially due to the fact that institutional shareholding, which is negatively correlated with insider shareholding, is now controlled. We also find that target firms are less likely to invest in R&D relative to their peers, again probably as a result of controlling for other firm characteristics, such as growth rate and cash holding.

3.2 Characteristics of investors

We obtain information on investor location, shareholding and AUM, by manually matching each investor's name with entity name in FactSet. Information on investor's AUM is obtained from FactSet dated as November 2016.[7] When such data are missing, we supplement them with investors' self-reported AUMs on PRI's website when they signed up as signatory. In total, our sample has 225 investors from 24 countries with an aggregate AUM of $23 trillion and an average AUM of $116 billion.

Insert Table 7 about here

Panel A of Table 7 reports the number of investors and their combined AUM and shareholdings in target firm

[7] FactSet includes only the current AUM information.

for an average ESG engagement in our sample. An average engagement in our sample has 26 investors, with a combined AUM of $2.7 trillion and a combined shareholding of $0.55 billion in target firm in the quarter before the engagement starting date. Successful engagements have slightly more numerous investors and higher shareholdings in target firms. We next classify investors into domestic and foreign ones based on the geographic location of their headquarters. Domestic (foreign) investors are those with headquarters located in the same (different) country as (from) the target firm. An average engagement in our sample has 24 foreign investors and two domestic ones. We also classify investors into three types, namely the assets owner (AO), investment managers (IM), and service providers (SP).[8] The information on investor type is based on investors' self-reported information on PRI's website recorded while signing up as signatory. An average engagement in our sample has 14 investment managers, 10 asset owners and one service provider. Not surprisingly, investment managers have the highest combined AUM and largest shareholding in target relative to asset owners and service providers, which have negligible AUM and shareholding in target firms. However, this could be a result of FactSet's data collection process. FactSet collects institutions' shareholding information from public sources, such as disclosures and regulatory filings, which may differ across countries and entity types. In cases where the filing is not required or public disclosure is not available, the institution may not appear in the database or the shareholding amount may be understated. This is more likely to be the case for asset owners, who may directly or indirectly own shares of target firm without disclosure.

Among 1,671 engagements in our sample, 410 have lead investor(s). Panel B of Table 7 reports the characteristics of lead investors for an average engagement with lead investor(s). On average, these engagements have 1.25 lead investors with a combined AUM of $170 billion and combined shareholding of $70 million in the target firm. The maximum number of lead investors in an engagement is four, while 80%

[8] The top five investment managers in AUM in our sample are Deutsche Bank Asset and Wealth Management (Germany), Amundi (France), T.Rowe Price (US), Legal & General Investment Management (UK), and AXA Investment Managers (France). The top five asset owners in AUM in our sample are AXA Group (France), Norwegian Government Pension Fund Global (Norway), Old Mutual (UK), California Public Employees' Retirement System or CalPERS (US), and Caisse de depot et placement du Quebec (Canada). Examples of service providers include PIRC Limited (UK), Sustainalytics (Netherlands), As You Sow (US), Australian Council of Superannuation Investors (Australia), and Hermes Equity Ownership Service (UK).

of engagements in our sample have only one lead. The lead investors are most likely to be investment managers (with 79% of our sample having at least one investment manager as lead), and least likely to be service providers (10% of our sample). The lead investors could be either foreign or domestic.

3.3 Determinants of engagement success

We now seek to estimate the determinants of success in individual engagements. In particular, we first examine whether target firm characteristics, including size (market capitalization), market-to-book ratio, return on assets, return volatility of its common stock, and institutional ownership, could explain success. These variables are measured as the fiscal year immediately before the engagement starting date.

After several years' experience of working together, PRI found it helpful to identify one or more lead investors to drive forward an initiative and have numerous supporting investors to participant. We therefore examine whether having a structured engagement, i.e. whether the engagement has lead investor(s), could explain success.

Next, we examine whether the composition of investors involved in ESG engagements, including geographic location (domestic vs. foreign) and type (investment manager, asset owner, vs. service provider) affects success. On the one hand, local investors would likely have linguistic and cultural advantages while establishing and maintaining the dialogue with the target firm. Proximity to the target may increase the chance of face-to-face interaction and thus the effectiveness of engagement. Having contacts in local regulatory body and/or media may also pressure target firms to adopt proposed changes. On the other hand, having foreign investors on board could broaden the scope and impact of engagements, particularly given the E&S issues are becoming of a global concern. Due to their different compensation structure relative to fund managers of asset owners, investment managers possess the incentive and expertise to press for changes in target firms that they believe could enhance shareholder value. Service providers, though equipped with the skills and knowledge, often lack the means (e.g., voting rights) to forcefully pursue such changes.

Lastly, we examine whether the influence that can be mobilized by the investors—either the entire PRI team

of investors that is actively seeking change, or just the lead investor(s)—could explain success. Measures of potential influence are based on the number of investors, their aggregate assets under management (AUM), or the combined dollar value of their investment in the target company.

Insert Table 8 about here

We conduct a multivariate analysis on the success of ESG engagements by using a probit regression model. The dependent variable is *D_Success*, defined as one for engagements recorded successful and zero for engagements recorded unsuccessful. We exclude engagements where success information is not available (655 observations). We include country fixed effects of the target to control for country factors, such as legal regime, capital market development, and investor protection that might explain the success rate. We also include area fixed effects to control for the possibility that success might be easier for certain engagement themes, in particular for governance. In Panel A of Table 8, for the columns where we measure investor influence for all investors engaging with the target, we see a negative relation between market-to-book and successful engagement. In other words, when the target is more of a value stock, with a relatively low market-to-book ratio, the likelihood of a successful engagement is elevated. We observe in these specifications that stock return volatility is negatively related to the success of engagements, which is in line with the targeting approach of the active owners and suggests that active owners prefer less volatile firms to deal with on E&S issues. This is an interesting result, since Dimson, Karakaş and Li (2015) and Hoepner et al. (2016) find evidence that ESG engagements tend to decrease the stock volatility of the firms. We further find that success is more probable when there is a large institutional holding in the target company.

The results in the first three columns of Table 8, Panel A suggest that the presence of a lead investor is associated with an enhanced probability of success, and this is bolstered by having an influential group of investors (more numerous, larger AUM, and higher shareholding) involved in the engagement. The former finding is consistent with PRI's more structured approach in engagement via learning. This is in line with findings of Dimson, Karakaş and Li (2015) such that "voice" is better exercised with higher voting rights and cash flow exposure. In the last three columns, we limit the sample to engagements with lead investor(s) to

further examine the impact of lead investor influence on success. We do not find the number of lead investors or the shareholding of lead investor(s) in the target to affect success. However, we find the size, i.e. the AUM, of the lead investor(s) to matter, probably because larger lead investors have higher purchasing potential and thus larger bargaining power.[9]

In Panel B of Table 8, we examine the impact of investor location (domestic vs. foreign). The results in the first three columns indicate that having foreign investors with larger AUM and higher shareholdings in target firms significantly improves the success rate. This finding is consistent with the conjecture that having foreign investors on board broadens the scope and impact of engagements, especially when these investors are influential. In the last three columns, we examine the impact of lead investor location. Success is more probable if the lead investor is located domestically in location and is influential. This is consistent with the conjecture that proximity improves the effectiveness of engagements due to local expertise and knowledge.

In Panel C of Table 8, we consider the role of investor type. There are three types of investors—namely, investment managers, asset owners, and service providers—but only the former two types usually have AUM and shareholdings in the target firm. Therefore, the analysis in this table mainly contrasts the role of investment managers to that of asset owners. The results suggest that the category of investor matters. There is a greater prospect of a successful engagement when there are more influential investment managers in the team. This finding is consistent with the conjecture that investment managers possess the incentive and expertise to press for changes in target firms. However, we do not find any benefit associated with having more influential investment manager(s) appointed as lead investor(s). To sum up, findings in this section suggest that the most effective structure of a coordinated ESG engagement is to appoint a local lead with high influence, and to have influential foreign investment managers on board.

The enhanced success rates with lead investor(s) may reflect a learning curve, and opportunities for

[9] This conjecture is consistent with our finding in Table 9 that lead investors start building up their shareholdings in target firms immediately after the initial engagement, especially for the engagements which turn out to be successful.

improvement in engagement strategies over time. This resembles the strategy of private equity investors. Given that some active owners, such as Blackrock, operate in both the private equity and the ESG domains, there may be learning opportunities that drive innovations in engagement. A related observation is that engagement success is positively related to the aggregate domestic lead investor's shareholding and the aggregate foreign investors' shareholding. This novel aspect may contribute to the ESG transfer and/or improved techniques for effective collaboration. This result is reminiscent of developing countries in which global brands ("foreign investors") invest in emerging markets in collaboration with affluent local families ("domestic lead investors").

3.4 Post-engagement changes in performance and shareholding

Table 9 reports the regression result for various performance outcomes following engagements. In particular, we analyze ROA, buy-and-hold annual return, sales growth, stock return volatility, ESG rating, institutional holdings, pension fund holdings, total investor US dollar holdings, and lead investor US dollar holdings. We include firm fixed effects and year fixed effects in all regressions. We also include firm size (market capitalization) and market-to-book ratio to control for firm characteristics and include industry medians of the dependent variable to control for potential industry trends. To assess the change in target firm performance, we limit the sample to two years before and four years after the engagement start date. The four post-engagement indicator variable, i.e. Post *Year+1*, *Year+2*, *Year+3*, and *Year+4* thus captures the performance change in *Year +N* relative to the average performance in the two-year period prior to engagement. We conduct the analysis separately for successful and unsuccessful engagements.

Results in Panel A of Table 9 suggest significant increases in the ROA, especially at Year +3 and Year +4. This is not surprising given that on average it takes two years for a project to complete. We also observe a significant increase in sales growth immediately after engagement. We do not observe such trend in Panel B, the unsuccessful engagement sample. These findings suggest that successful engagements in ESG issues lead to improvement in firm sales and profitability. Interestingly, we do not observe any increase in stock return or stock return volatility. We also observe that lead investor holdings increase significantly after successful engagements, but no change after unsuccessful engagements. The former finding could be a result of lead

investors using increasing shareholding as a bargaining tool to achieve success.

Insert Table 9 about here

Our findings suggest that successful engagements lead to improvement in the profitability of the targeted firms in the medium to long horizon. Increases in the lead investors' holding in the target company post engagements suggest that such investors are indeed "universal owners" with ultra-long-term holdings and substantial ownerships. The decrease in the institutional holdings in the first year after the engagements may enable these activists to realize potential gains. It enables them to undo their overweight position in the target company that had been necessary to boost their voting rights and to strengthen their voice during engagements.

Our findings with no change in performance measures after unsuccessful engagements are consistent with Dimson, Karakaş and Li (2015) who report no significant changes following unsuccessful engagements by a single major active investor.

4. Conclusion

Our study provides the first detailed evidence on the nature and impact of coordinated engagements on ESG issues in a global setting. Based on a wide-ranging series of collaborations, we find that engagements tend to target the largest firms in their respective industry and country. This suggests that ESG engagements are pioneered with, provide benefit to, and are afforded more by leading companies in target countries and industries. Our findings also suggest that engagements on environmental and social issues tend to originate and be harnessed in developed countries, and transmitted to developing countries – albeit with lower success rates.

Activists, too, are large and they are also persuasive. We show that leadership is decisive in collaborative engagements. Success rates are elevated by about one-third when there is a lead investor who heads the dialogue, especially when that investor is located in the same geographic region as the targeted firm. We also

show that investor influence is crucial. Success rates are higher when activist investors are more numerous, have larger assets under management and own a bigger proportion of the target company, and this is especially important when investment managers are engaging across national boundaries. These findings suggest that, for maximum effect, coordinated engagements on E&S issues should preferably have a lead investor that is well suited linguistically, culturally and socially to influencing target companies. Supporting investors are also vital, and they should ideally be major investment managers that have influence because of their scale, ownership and geographic breadth.

Finally, we report that after engagements have concluded successfully, target companies experience an improved ROA and sales growth and increased ownership by the lead investor. This contrasts with unsuccessful engagements, which are not followed by any change in ROA or in shareholding. This provides evidence, consistent with the recent growing literature on responsible investing, that E&S engagements enhance firm performance.

We have studied the engagements facilitated by world's major proponent of responsible investment. While the effectiveness of other groups of investors may of course be different, our sample is of unprecedented breadth and geographical diversity. We conclude that coordinated and collaborative activism is beneficial not only on social and environmental criteria, but that it is also followed by fundamental improvements in corporate profitability.

Appendix A: Examples of PRI-Coordinated ESG Engagement Projects

This appendix provides a brief summary of three coordinated engagement sequences. Further details are provided by Piani (2013), from whom the following summaries are adopted.

A.1 UN Global Contract (UNGC)

During 2012, 32 PRI signatories representing $3 trillion, led by Aviva Investors, engaged with 116 UNGC member companies regarding their communication on progress. They welcomed advanced reporting by some companies, and encouraged non-communicating companies to respond and thereby reactivate their UNGC status. Phone and email follow-up with the 25 non-communicating companies was undertaken by investors and the PRI Secretariat and by the UNGC's local networks. By end-2012, 76% of non-communicating companies had responded and regained active status. Consistent and frequent follow-up appeared to encourage responses, as did having local-level contact points.

Success is recorded when the target firm became active.

A.2 Anti-corruption

During 2010-13, PRI signatories with assets of $2 trillion engaged with 20 companies in various sectors in the belief that robust anti-corruption measures enhance the corporate performance, while the absence of such measures can exacerbate risk exposures. A broad group of investors wrote to companies requesting details of their anti-corruption systems, and an independent research provider analyzed their performance. They then analyzed non-responders' performance, and letters were sent to them presenting the findings and requesting further information. Overall, 85% of targets responded and were willing to engage with investors. One-third of responders demonstrated improved systems and transparency. After a further letter in 2012, over 60% of non-responding companies agreed to engage with investors. By 2013, 16 of the companies recorded improved performance, with 10 quadrupling their score.

Success is evaluated based on comparing anti-corruptions scores in pre- and post-engagement periods. Engagements involving target companies whose anti-corruption scores improved by 10% or more are

considered as successful, while engagements on those with scores improving by under 10% are considered to be unsuccessful.

A.3 Responsible business in conflict areas

During 2009-12, 16 PRI signatories with assets of $0.6 trillion, led by Hermes Fund Managers, engaged with 16 US, European and Japanese consumer electronics companies to ensure their supply chains were not involved in the Eastern Congo conflict. They requested public disclosure on mineral-sourcing and agreement to independent verification of suppliers' stated practices. 18 meetings were held with target companies, and several investors also lobbied in favor of the SEC's Conflict Minerals Provision rule (Section 1502) of the 2012 Dodd-Frank Act. By 2012, there were quantified improvements in public disclosure and implementation measures, including supplier monitoring and external verification. In 2012 the SEC Conflict Minerals Provision rule was approved, the expectation of potential regulatory requirements having strengthened the business case for companies to respond to investor concerns.

Success is evaluated based on comparing disclosure and implementation scores in pre- and post-engagement periods. Engagements on target companies whose scores improved for 10% or more are considered as successful, while engagements on those with scores improving 10% or below are considered as unsuccessful.

Appendix B: Variable Definitions

Variable Name	Definition
Fundamental data (Source: WorldScope & Compustat Global and North America)	
Market Cap	Market capitalization at fiscal year-end (in $millions)
Tobin's Q	(Total assets-Book value of equity + Market value of equity)/ Total assets
Market-to-book	Market value of equity / Book value of equity
Stock return	Buy-and-hold stock return of the fiscal year
Stock return volatility	Standard deviation of monthly stock returns during the fiscal year
Sales growth	(Current year sales - Previous year sales) / Previous year sales
Return on assets	Earnings before interest, tax, depreciation and amortization (EBITDA) / Total assets
Cash/Assets	Cash / Total assets
Capex/Assets	Capital expenditures / Total assets
R&D/Assets	R&D expenditures / Total assets
Leverage	(Short-term debt + Long-term Debt) / Total assets
Dividend payout	Common dividends in cash / Net income before extraordinary items
ADR firm indicator	A firm-level indicator suggesting a foreign firm has ADR traded in the US
Insider holding	Number of closely held shares divided by common shares outstanding
Shareholding data (Source: FactSet)	
Institutional holding	Percentage of shareholding by institutions
Independent institutional holding	Percentage of shareholding by independent institutions; independent institutions include investment companies (mutual funds, fund of fund, etc), investment advisors, hedge funds, VCs, and are as defined in Ferreira and Matos (2008)
Pension fund holding	Percentage of shareholding by pension funds, endowments, and sovereign wealth managers, i.e. Category 5 in Ferreira and Matos (2008)
Mutual fund holding	Percentage of shareholding by mutual fund and fund of fund, i.e. Category 3 in Ferreira and Matos (2008)
Blockholder holding	Percentage of shareholding by block holders. Block holders are defined as those holding 5% or above.
ESG rating data (Source: Sustainalytics)	
Overall ESG rating	The weighted total ESG score
Environment rating	The weighted environment score

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Table 1: Studies of shareholder engagement on ESG issues

This table reports a summary of empirical literature on shareholder activism on ESG issues. Panel A reports the prior studies, and Panel B report the current study for comparison.

Study	**No. of investors**	**Data provider**	**Investor location**	**Sample period**	**Number of engagements** Total	US/UK	RoW
Panel A: Prior studies							
Atta-Darkua (2017)	1	GPFG	Norway	2005–16	119	45	74
Barber (2007)	1	CalPERS	US	1992–05	115	115	0
Barko (2015)	1	Undisclosed	Netherlands	2005–14	847	na*	na
Bauer Clark Viehs (2014)	1	F&C	England	2006–11	397	159	238
Becht et al. (2009)	1	Hermes	England	1998-04	41	41	0
Becht et al. (2017b)	1	Standard Life	Scotland	2003–15	na	na	na
Carleton Nelson Weisbach (1998)	1	TIAA-CREF	US	1992–96	45	45	0
Dimson Karakaş Li (2015)	1	Undisclosed	UK	1999–09	2,152	2,152	0
Hoepner et al. (2016)	1	Hermes	England	2005–14	682	291	391
Kuijpers et al. (2015)	1	APG	Netherlands	2008–13	700	28	72
Smith (1996)	1	CalPERS	US	1987–93	78	78	0
Average (exc. Dimson Karakaş Li)	**1**	**One firm**	**US/UK**	**1987–16**	**302**	**89**	**81**
Panel B: This study							
This study	225	PRI	Global	2007–17	1,806	403	1,403

* 24% of the sample is stated to be from North America.

Table 2: List of PRI-coordinated ESG projects

This table lists PRI-coordinated ESG projects used in our analysis. An engagement is defined as one target firm in one project. Data on success is provided by PRI and is available for 1,083 of 1,806 engagements. Success% is the number of successful engagements divided by the total number of engagements. Success measure is the criteria that PRI used to evaluate the success engagement.

Project name	Project duration	Engagements		Success rate %	Success measure
		Total	Successful		
Environment Area					
CEO Water Mandate	01 Aug 08 – 30 Sep 10	102	21	20.6%	Whether the target firm signed up in the initiative
CDP Engagement on Emissions Reduction Plans	01 Sep 09 – 31 Dec 11	85	22	25.9%	Whether target firm set emission reduction program in the year after engagement
CDP Water Disclosure 2011	01 Feb 11 – 30 Sep 11	124	34	27.4%	Whether the target firm disclosed CDP water in the year after engagement
Carbon Disclosure Leadership Index (CDLI 2011)	01 Mar 11 – 31 Dec 11	96	24	25.0%	Whether target firm's leadership index improves from the bottom quartile
Sustainable Fisheries	01 Jun 11 – 31 Jan 13	41	26	63.4%	Whether the target firm provided a response which addressed requested areas
Forest Footprint Disclosure 2011	01 Aug 11 – 31 Mar 12	27	4	14.8%	Whether the target firm disclosed forest footprint
CDP Water Disclosure 2012	01 Mar 12 – 31 Oct 12	41	6	14.6%	Whether target firm's leadership index improves from the bottom quartile
Carbon Disclosure Leadership Index (CDLI 2012)	01 Mar 12 – 31 Jan 13	72	30	41.7%	Whether target firm's leadership index improves from the bottom quartile
Forest Footprint Disclosure 2012	01 Jun 12 – 31 Oct 12	9	0	0.0%	Whether the target firm disclosed forest footprint
Fracking	19 Oct 12 – 23 Dec 16	29	26	89.7%	Scorecards
Water Risks in Agricultural Supply Chains	19 Oct 12 –	48			N/A
CDP Carbon Action	16 Nov 12 – 19 Dec 14	25	8	32.0%	Whether target firm sets a target or demonstrates progress to setting target
Palm Oil (buyers)	25 Jan 13 –	46			N/A
Palm Oil (growers)	26 Mar 14 –	13	12	92.3%	Scorecards (interim)
Corporate Climate Lobbying	03 Mar 15 –	19			N/A

Project name	Project duration	Engagements		Success rate %	Success measure
		Total	Successful		
Governance Area					
Anti-corruption (Phase 1)	01 Mar 10 – 31 Mar 13	20	16	80.0%	Scorecards
Director Nominations	19 Oct 12 – 30 Sep 16	23	18	78.3%	Scorecards
Anti-corruption (Phase 2)	01 Apr 13 – 15 Jun 15	32	29	90.6%	Scorecards
Social Area					
Sudan Engagement	01 Jan 08 – 31 Dec 12	7	1	14.3%	Scorecards
Indigenous Rights	01 Jun 09 –	11	3	37.5%	Scorecards
Senior Gender Equality with Global Companies	01 Feb 10 – 30 Sep 12	57	12	48.0%	Scorecards
Responsible Business in Conflict Areas	01 Nov 10 – 30 Sep 13	16	10	71.4%	Scorecards
Employee Relations	19 Oct 12 – 31 Dec 15	26	16	61.5%	Scorecards
Labour Standards in the Agri-cultural Supply Chain (Phase 1)	19 Oct 12 – 31 Dec 15	34	20	58.8%	Scorecards
Human Rights in Extractives	03 Feb 14 –	32	27	84.4%	Scorecards (interim)
UN Global Compact					
COP1: First Annual Engagement with UNGC Companies	01 Jan 07 – 31 Dec 08	101	25	32.9%	Whether the target firm became active
COP2: Second Annual Engagement with UNGC Companies	01 Dec 08 – 31 Dec 09	130			N/A
COP3: Third Annual Engagement with UNGC Companies	01 Jan 10 – 31 Dec 10	130	25	38.5%	Whether the target firm became active
COP4: Fourth Annual Engagement with UNGC Companies	01 Jan 11 – 31 Dec 11	122	12	36.4%	Whether the target firm became active
COP5: Fifth Annual Engagement with UNGC Companies	01 Feb 12 – 28 Feb 13	116	18	75.0%	Whether the target firm became active
COP6: Sixth Annual Engagement with UNGC Companies	10 Mar 14 – 16 Apr 14	172			N/A

Table 3: Summary of ESG engagements by area

This table summarizes characteristics of ESG engagements by area, i.e. environment, social, governance and United National's Global Compact (UNGC). An engagement is defined as one target firm in one project. Panel A includes all engagements provided by PRI, and Panel B only includes engagements where we are able to locate minimum firm-level information on target, i.e. with information on market capitalization in the year prior to engagement start date. Data on success is provided by PRI and the success measure for each project is included in Table 2. Information on success is available in Panel A for 1,083 of 1,806 engagements and in Panel B for 1,016 of 1,671 engagements. Success% is the number of successful engagements divided by the total number of engagements. This table also reports the mean and median of the engagement horizon, defined as the number of days from the starting until the ending of each project (listed in Table 2), separately for successful and unsuccessful engagements. The engagement horizon is identical for all target firms in a project.

Panel A: PRI coordinated engagements universe

Area	No. of projects	Total engagements	Successful engagements	Success %
Environment	15	777	213	32
Social	7	183	89	61
Governance	3	75	63	84
UNGC	6	771	80	40
Total/Average	**31**	**1,806**	**445**	**41**

Panel B: PRI coordinated engagements sample

Area	No. of projects	Total engagements	Successful engagements	Success %	Mean (median) days till success	Mean (median) days till unsuccess
Environment	15	750	209	33	622 (610)	483 (305)
Social	7	176	85	60	1,122 (1,168)	1,189 (1,168)
Governance	3	75	63	84	1,069 (1,126)	1,177 (1,126)
UNGC	6	670	71	44	485 (393)	524 (364)
Total/Average	**31**	**1,671**	**428**	**42**	**738 (730)**	**557 (364)**

Table 4: Summary of ESG engagements by industry, region and country

This table summarizes the number of engagements, number of target firms, and the number of countries where target firms are domiciled in by industry (one-digit SIC) geographic region of and country of target firms' headquarters. In Panel A, *Agriculture* includes Agriculture, Forestry, Fishing; *Infrastructure* includes Transportation, Communications, Electric, Gas, and Sanitary Services; *Financial* includes Finance, Insurance, Real Estate; *Non-classifiable* includes those without industry data. In Panel B, regions are as defined by FTSE Russell (FTSE.com/Analytics/FactSheets). Emerging markets comprise Advanced Emerging plus Secondary Emerging. In Panel C, *Next 10* countries include Finland, Singapore, Norway, Denmark, Hong Kong, Mexico, Russia, Chile, Indonesia, Belgium; *Following 10* countries include Austria, Argentina, Lithuania, Malaysia, Portugal, Taiwan, Bermuda, Israel, Luxembourg, Ireland; *Penultimate 10* countries include Colombia, Croatia, Egypt, Sri Lanka, Thailand, Turkey, Bulgaria, Poland, Greece, Peru; and *Final 15* countries include Nigeria, New Zealand, Tunisia, Bosnia-Herzegovina, Czech Republic, Hungary, Macedonia, Slovenia, Bangladesh, Cyprus, Kenya, Latvia, Oman, United Arab Emirates, Zambia. Data on success is provided by PRI and is available in 1,016 of 1,671 engagements. Success% is the number of successful engagements divided by the total number of engagements.

Descriptor	**Number of engagements**					**Success %**	**No. of targets**	**No. of countries**
	Total	Environment	Social	Governance	UNGC			
Panel A: Industry								
Manufacturing	795	385	70	33	307	39	451	52
Infrastructure	231	93	9	9	120	38	141	35
Wholesale & retail trade	193	96	45	7	45	50	92	31
Mining	189	116	34	7	32	50	97	24
Financial	120	4	8	13	95	50	79	34
Services	73	21	7	3	42	30	61	21
Construction	34	12	2	2	18	44	24	12
Non-classifiable	34	22	1	1	10	42	17	13
Agriculture	2	1	0	0	1	50	2	2
Panel B: Region								
Developed Europe ex-UK	551	195	43	28	285	51	277	16
Emerging and Frontier	403	126	29	7	241	33	264	37
Other Developed ex-US	314	173	38	13	90	36	193	8
United States	291	196	47	18	30	44	163	1
United Kingdom	112	60	19	9	24	49	67	1
Panel C: Country								
United States	291	196	47	18	30	44	163	1
France	124	48	7	16	53	50	61	1
United Kingdom	112	60	19	9	24	49	67	1
Japan	95	44	9	4	38	29	62	1
Germany	83	36	2	2	43	36	44	1
Canada	79	44	23	1	11	34	50	1

Descriptor	Number of engagements					Success %	No. of targets	No. of countries
	Total	Environment	Social	Governance	UNGC			
India	78	32	1	.	45	22	57	1
Spain	58	6	2	2	48	50	28	1
Brazil	56	14	12	1	29	35	30	1
Italy	54	8	9	2	35	55	27	1
Australia	45	33	1	5	6	61	29	1
South Korea	44	24	1	1	18	35	24	1
Switzerland	41	11	10	4	16	62	23	1
Sweden	41	21	3	0	17	48	21	1
China	34	13	4	4	13	27	19	1
South Africa	34	14	4	0	16	45	19	1
Netherlands	32	18	4	0	10	74	13	1
Pakistan	32	0	0	0	32	50	17	1
Next 10 countries	181	87	12	4	78	43	100	10
Following 10 countries	84	31	5	2	46	38	50	10
Penultimate 10 countries	46	4	1	0	41	39	38	10
Final 15 countries	27	6	0	0	21	37	22	15
Total	**1,671**	**750**	**176**	**75**	**670**	**42**	**964**	**63**

Table 5: Attributes of target firm in ESG engagements

This table compares attributes of target firms with their peers in the fiscal year immediately before the engagement start date. For each target, the peer firms are drawn from the same country and industry (3-digit SIC). When fewer than three peer firms are found for a particular target, we relax the industry to 2-digit SIC. When more than 10 peers are found, we keep 10 with the closest market capitalization to the one of the target. We then calculate the average of each variable among the peers and compare the average with the target. The left panel reports summary statistics for all target firms with available data and the right panel reports the average difference between target firms and the peer group with available information on both. For environment rating, the statistics are only calculated for engagements in environment areas. All variables are defined in Appendix B. All continuous variables are winsorized at 1st and 99th percentile levels.

	Summary Statistics				Diff. from country/industry mean		
	Mean	Median	StDev	Obs	Avg. Diff.	t-stat	Obs
Firm attributes	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Market Cap ($billion)	39.18	11.51	93.64	1,671	35.38	15.63	1,587
Tobin's Q	1.62	1.32	1.00	1,664	-0.30	-7.08	1,580
Market-to-book	2.55	1.83	2.55	1,652	0.03	0.47	1,565
Stock return	0.16	0.10	0.47	1,655	-0.07	-5.72	1,567
Stock return volatility	0.09	0.08	0.05	1,650	-0.04	-22.13	1,563
Return on assets	0.13	0.12	0.09	1,668	0.08	16.68	1,584
Asset turnover	0.91	0.77	0.68	1,662	0.00	0.30	1,578
Leverage	0.25	0.24	0.15	1,671	0.01	3.48	1,587
Dividend payout	0.39	0.34	0.66	1,671	0.09	5.35	1,587
Sales growth	0.09	0.07	0.21	1,656	-0.13	-11.30	1,566
Cash/Assets	0.06	0.04	0.07	1,658	-0.03	-12.87	1,571
Capex/Assets	0.01	0.00	0.02	1,671	0.00	-4.74	1,587
R&D/Assets	0.06	0.05	0.05	1,671	0.00	3.07	1,587
Institutional holding	0.72	0.99	0.40	1,671	0.28	29.03	1,587
Independent institutional holding	0.64	0.85	0.36	1,671	0.24	27.27	1,587
Pension fund holding	0.07	0.06	0.07	1,671	0.04	25.32	1,587
Mutual fund holding	0.13	0.12	0.11	1,671	0.06	22.24	1,587
Blockholder holding	0.22	0.18	0.20	1,671	-0.01	-1.33	1,587
Insider holding	0.27	0.17	0.29	1,671	-0.08	-11.23	1,587
ADR firm indicator	0.44	0.00	0.50	1,671	0.35	30.13	1,587
Overall ESG rating	61.99	62.00	10.22	982	5.41	15.28	648
Environment rating	55.25	56.00	12.03	457	3.32	5.11	289

Table 6: Determinants of targeting in ESG engagements

This table examines the determinants of targeting by comparing target firms with their peers in the fiscal year immediately before the engagement start date using probit regressions. For each target, the peer firms are drawn from the same country and industry (3-digit SIC). When fewer than three peer firms are found for a particular target, we relax the industry to 2-digit SIC. When more than 10 peers are found, we keep 10 with the closest market capitalization to the one of the target. For each target, we obtain one observation for the peer by calculating the average of its peer group. The dependent variable D_Target is defined as one for the target and zero for the peer. Coefficients are presented as marginal effects. The first two columns include all engagements with data on regression variables and the last two columns only include engagements in environmental area. All variables are defined in Appendix B. All regressions incorporate year fixed effects. Standard errors are clustered at the target firm level. All continuous variables are winsorized at 1st and 99th percentile levels. ∗∗∗, ∗∗, and ∗ denote significance at the 1%, 5%, and 10% level, respectively.

Determinants of Targeting	Prob (D_Target)			
	All Areas		Environmental Area	
	(1)	(2)	(3)	(4)
Market Cap	0.021***	0.016***	0.018***	0.012***
	(12.00)	(10.49)	(10.25)	(8.76)
Tobin's Q	-0.051***	-0.052**	-0.033**	-0.042**
	(-3.53)	(-2.50)	(-2.03)	(-2.13)
Stock return	-0.054***	-0.098***	-0.119***	-0.113***
	(-2.68)	(-3.17)	(-3.17)	(-2.91)
Stock return volatility	-0.558***	0.375	-0.523*	0.191
	(-2.71)	(1.18)	(-1.90)	(0.59)
Return on assets	1.122***	0.756***	1.030***	0.526**
	(7.75)	(3.98)	(5.33)	(2.35)
Asset turnover	-0.006	-0.018	-0.002	-0.024
	(-0.33)	(-0.91)	(-0.11)	(-1.39)
Leverage	0.254***	0.135	0.383***	0.101
	(3.14)	(1.50)	(3.65)	(1.09)
Dividend payout	0.008	-0.028	-0.000	-0.027*
	(0.50)	(-1.23)	(-0.02)	(-1.70)
Sales growth	-0.293***	-0.315***	-0.208***	-0.115***
	(-7.75)	(-5.49)	(-4.34)	(-2.58)
Cash/Assets	-0.291*	-0.251	-0.343	-0.028
	(-1.71)	(-1.32)	(-1.50)	(-0.16)
Capex/Assets	-0.707***	-0.256	-0.587**	-0.407*
	(-3.33)	(-1.16)	(-2.32)	(-1.89)
R&D/Assets	-1.366**	-1.497***	-1.509**	-1.664***
	(-2.38)	(-3.31)	(-2.39)	(-3.59)
Institutional holding	0.249***	0.272***	0.233***	0.145***
	(7.83)	(5.89)	(5.87)	(2.78)
Insider holding	0.007	-0.085	-0.063	-0.124**
	(0.18)	(-1.47)	(-1.27)	(-2.03)
ADR firm indicator	-0.120***	-0.013	-0.052**	0.024
	(-6.04)	(-0.57)	(-2.23)	(1.21)
Overall ESG rating		0.006***		
		(4.11)		
Environment rating				0.000
				(0.11)
Observations	3,026	1,258	1,394	572
Pseudo R-squared	0.393	0.541	0.462	0.521

Table 7: Characteristics of ESG investors

This table presents certain characteristics of the investors involved in the collaborative engagements with the target firms. Panel A presents the characteristics of all investors involved in ESG engagements. Panel B presents characteristics of lead investors. We classify investors into domestic and foreign ones based on the geographic location of their headquarters. Domestic (foreign) investors are those with headquarters located in the same (different) country as (from) the target firm. We also classify investors into three types, namely the assets owner (AO), investment managers (IM), and service providers (SP). The information on investor type is based on investors' self-reported information on PRI's website when they signed up as signatory. Total investor AUM is the sum of current AUMs of all investors in an engagement, wherever the information on AUM is available. Information on investor's AUM is obtained from FactSet dated as November 2016. When such data are missing, we supplement them with investors' self-reported AUMs on PRI's website when they signed up as signatory. Total investor shareholding is the sum of shareholdings in target from all investors involved in an engagement. Shareholding of each investor is calculated as percentage shares in target firm multiplied by target's market capitalization in the quarter immediately before the engagement starting date. Information on shareholding is obtained from FactSet. All continuous variables are winsorized at 1st and 99th percentile levels.

Investor Characteristics	**All Engagements**		**Successful Engagements**		**Unsuccessful Engagements**	
	Mean	Median	Mean	Median	Mean	Median
Panel A: All Investors	**N = 1,671**		**N = 428**		**N = 588**	
Total number of investors	26.11	24.00	25.38	24.00	24.37	21.00
Total number of foreign investors	24.38	22.00	23.13	21.00	22.41	20.00
Total number of domestic investors	1.73	0.00	2.25	1.00	1.96	0.00
Total number of Investment Managers (IM)	13.90	14.00	15.03	13.50	14.02	16.00
Total number of Asset Owners (AO)	9.63	11.00	8.03	8.00	7.27	8.00
Total number of Service Providers (SP)	1.15	1.00	1.18	1.00	1.37	1.00
Total investor AUM (current, $b)	2763.53	2760.17	2594.63	2410.77	2500.21	2523.19
Total foreign investor AUM (current, $b)	2604.19	2706.72	2396.98	2161.20	2354.88	2418.13
Total domestic investor AUM (current, $b)	159.34	0.00	197.65	4.95	145.34	0.00
Total IM AUM (current, $b)	2233.85	2326.75	2209.00	1886.17	2090.52	1886.17
Total AO AUM (current, $b)	529.21	433.14	385.09	258.14	408.90	250.17
Total SP AUM (current, $b)	3.78	0.00	6.26	0.00	3.27	0.00
Total investor shareholdings ($b)	0.55	0.08	0.70	0.13	0.34	0.04
Total foreign investor shareholdings ($b)	0.43	0.05	0.55	0.07	0.24	0.02
Total domestic investor shareholdings ($b)	0.13	0.00	0.16	0.00	0.10	0.00
Total IM shareholdings ($b)	0.49	0.07	0.64	0.12	0.31	0.03
Total AO shareholdings ($b)	0.07	0.00	0.07	0.00	0.03	0.00
Total SP shareholdings ($b)	0.00	0.00	0.00	0.00	0.00	0.00
Panel B: Lead investors	**N = 410**		**N = 182**		**N = 85**	
Total number of lead investors	1.25	1.00	1.30	1.00	1.28	1.00
Total number of foreign lead investors	0.69	1.00	0.74	1.00	0.67	1.00
Total number of domestic lead investors	0.56	1.00	0.56	0.50	0.61	1.00

Investor Characteristics	All Engagements		Successful Engagements		Unsuccessful Engagements	
	Mean	Median	Mean	Median	Mean	Median
Total number of lead Investment Managers (IM)	0.96	1.00	1.03	1.00	0.92	1.00
Total number of lead Asset Owners (AO)	0.19	0.00	0.21	0.00	0.27	0.00
Total number of lead Service Providers (SP)	0.10	0.00	0.09	0.00	0.19	0.00
Total lead investor AUM (current, $b) *	170.27	69.63	208.35	130.81	124.95	34.35
Total foreign lead investor AUM (current, $b) *	138.60	14.38	165.56	54.59	112.61	7.63
Total domestic lead investor AUM (current, $b) *	31.67	0.00	42.79	0.00	12.34	0.00
Total lead IM AUM (current, $b)	156.03	34.35	188.22	97.58	112.15	13.40
Total lead AO AUM (current, $b)	14.21	0.00	20.11	0.00	12.76	0.00
Total lead SP AUM (current, $b)	2.29	0.00	1.97	0.00	5.45	0.00
Total lead investor shareholdings ($b)	0.07	0.00	0.08	0.00	0.02	0.00
Total foreign lead investor shareholdings ($b)	0.06	0.00	0.06	0.00	0.02	0.00
Total domestic lead investor shareholdings ($b)	0.02	0.00	0.03	0.00	0.00	0.00
Total lead IM shareholdings ($b)	0.07	0.00	0.07	0.00	0.02	0.00
Total lead AO shareholdings ($b)	0.01	0.00	0.01	0.00	0.00	0.00
Total lead SP shareholdings ($b)	0.00	0.00	0.00	0.00	0.00	0.00

* Number of observations are 390, 174, and 85 for all, successful and unsuccessful engagements, respectively.

Table 8: Determinants of successful ESG engagements

This table examines the determinants of success by comparing successful engagements with unsuccessful engagements using probit regressions. The dependent variable D_Success is defined as one for the successful engagements and zero for unsuccessful engagements. Coefficients are presented as marginal effects. All regressions include control variables (market capitalization of target and ROA of target), none of which are significant. Target firm characteristics are measured as the fiscal year immediately before the engagement start date. The first three columns include all engagements with data on success and regression variables and the last three columns only include engagements with at least one lead investor. In Panel A, (lead) investor influence is measured as the number of, total asset under management (AUM) of, and total value of shareholding in target of (lead) investors. In Panel B, we classify investors based on the geographic location of their headquarters. Domestic (Foreign) investors are those with headquarters located in the same (different) country as the target firm. In Panel C, we classify investors based on their type, i.e. whether the investor is an investment manager or not (i.e. asset owner or service provider). The information on investor type is based on investors' self-reported information on PRI's website when they signed up as signatory. Total investor AUM is the sum of current AUMs of all investors in an engagement, wherever the information on AUM is available. Information on investor's AUM is obtained from FactSet dated as November 2016. When it is missing, we supplement it with investors' self-reported AUM on PRI's website when they signed up as signatory. Total investor shareholding is the sum of shareholdings in target from all investors involved in an engagement. Shareholding of each investor is calculated as percentage shares in target firm multiplied by target's market capitalization in the quarter immediately before the engagement starting date. Information on shareholding is obtained from FactSet. Other variables are defined in Appendix B. All regressions incorporate year fixed effects and firm fixed effects. Standard errors are clustered at the target firm level. All continuous variables are winsorized at 1st and 99th percentile levels. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

	Prob (D_Success=1)					
Determinants of Success	**Engagements with all investors**			**Engagements with lead investor**		
Investor influence measured as ➔	Number	AUM	$ in target	Number	AUM	$ in target
Panel A: Influence of lead investor						
Market-to-book of target	-0.024***	-0.022**	-0.023**	-0.025*	-0.024**	-0.017
	(-2.63)	(-2.50)	(-2.48)	(-1.89)	(-2.02)	(-1.41)
Stock return volatility of target	-0.953**	-0.950**	-0.849**	1.001	0.901	0.692
	(-2.31)	(-2.30)	(-2.04)	(1.18)	(1.08)	(0.86)
Institutional holding (%) in target	0.183***	0.188***	0.156**	0.259*	0.327**	0.190
	(2.92)	(3.00)	(2.46)	(1.69)	(2.03)	(1.26)
Engagement has lead investor(s)	0.326***	0.331***	0.299***			
	(5.06)	(5.20)	(4.93)			
Investor influence	0.003*	0.035**	0.045***	0.009**	0.053**	0.070**
	(1.66)	(2.43)	(2.63)	(2.52)	(2.38)	(2.46)
Lead investor influence				-0.031	0.519**	0.319
				(-0.49)	(2.16)	(0.74)
Pseudo R-squared	0.164	0.167	0.166	0.131	0.172	0.132
Panel B: Impact of investor location						
Market-to-book of target	-0.024***	-0.023**	-0.023**	-0.025*	-0.024*	-0.015
	(-2.62)	(-2.55)	(-2.49)	(-1.89)	(-1.79)	(-1.23)
Stock return volatility of target	-0.957**	-0.951**	-0.851**	0.955	0.961	0.665
	(-2.31)	(-2.29)	(-2.04)	(1.11)	(1.14)	(0.84)
Institutional holding (%) in target	0.182***	0.190***	0.156**	0.258*	0.312*	0.186
	(2.92)	(3.03)	(2.46)	(1.66)	(1.93)	(1.23)

Determinants of Success	**Engagements with all investors**			**Engagements with lead investor**		
Investor influence measured as ➔	Number	AUM	$ in target	Number	AUM	$ in target
Engagement has lead investor(s)	0.326***	0.336***	0.300***			
	(5.04)	(5.28)	(4.90)			
Foreign investor influence	0.003	0.030**	0.047*	0.008**	0.043*	0.100***
	(1.50)	(2.02)	(1.90)	(2.35)	(1.88)	(2.88)
Domestic investor influence	0.002	0.113	0.049	0.007	0.166	0.007
	(0.19)	(1.62)	(0.95)	(0.40)	(0.95)	(0.06)
Foreign lead investor influence				-0.012	0.411*	-0.169
				(-0.18)	(1.75)	(-0.34)
Domestic lead investor influence				-0.052	1.810**	2.752**
				(-0.65)	(2.05)	(2.08)
Pseudo R-squared	0.164	0.168	0.166	0.133	0.185	0.148
Panel C: Role of investment managers						
Market-to-book of target	-0.023***	-0.022**	-0.023**	-0.019	-0.025**	-0.017
	(-2.60)	(-2.51)	(-2.45)	(-1.44)	(-2.06)	(-1.34)
Stock return volatility of target	-0.962**	-1.034**	-0.844**	1.204	0.774	0.614
	(-2.32)	(-2.49)	(-2.02)	(1.39)	(0.91)	(0.76)
Institutional holding (%) in target	0.188***	0.192***	0.155**	0.229	0.337**	0.196
	(3.01)	(3.09)	(2.44)	(1.50)	(2.06)	(1.30)
Engagement has lead investor(s)	0.313***	0.304***	0.303***			
	(4.73)	(4.65)	(4.97)			
Investment Manager influence	0.007*	0.055***	0.035*	0.026***	77.820	0.031
	(1.79)	(3.25)	(1.71)	(3.21)	(0.20)	(0.86)
Other investor influence	-0.002	-0.107*	0.186	-0.028*	0.196	0.634*
	(-0.48)	(-1.85)	(1.17)	(-1.66)	(0.91)	(1.68)
Investment Manager lead investor influence				-0.000	0.405	0.179
				(-0.00)	(0.81)	(0.40)
Other lead investor influence				-0.087	0.078	11.580
				(-1.13)	(0.20)	(0.99)
Pseudo R-squared	0.165	0.171	0.166	0.153	0.171	0.145
Observations (for all three panels)	973	973	973	247	236	247

Table 9: Change in target performance and shareholding following ESG engagements

This table examines the change in target firm's performance and shareholding following ESG engagements. Panel A reports regression results using successful engagement sample, and Panel B reports results using unsuccessful engagement sample. For all columns except Column (9), the sample includes target firms engaged in all engagement areas with information on success and available data to run regressions. In Column (9), the sample includes only target firms engaged in the environment area. For each target firm, we keep the data 2 years before and 4 years after the start of engagement whenever the information is available. Post *Year+N* is defined as one for observations obtained from the *Nth* year after the start of engagement Industry controls are sample median of dependent variable for all non-target firms from same country, industry (2-digit SIC) and year. Other variables are defined in Appendix B. All regressions incorporate year fixed effects and firm fixed effects. Standard errors are clustered at the firm level. All continuous variables are winsorized at 1st and 99th percentile levels. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

Change in Performance	**ROA**	**Stock return**	**Sales growth**	**Stock return volatility**	**Overall ESG rating**	**Environment rating**	**Institutional holding**	**Pension fund holding**	**Total investor holding ($)**	**Lead investor holding ($)**
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**
Panel A: Successful engagements										
Post *Year+1*	0.005	0.030	0.038***	-0.002	-0.392	-0.488	-0.016*	-0.179	-0.092	0.073**
	(1.30)	(1.27)	(3.22)	(-0.89)	(-1.21)	(-0.46)	(-1.78)	(-1.00)	(-1.06)	(2.11)
Post *Year+2*	0.006	0.035	0.029**	0.001	-0.421	-0.368	-0.010	0.018	-0.072	0.119**
	(1.51)	(1.15)	(2.26)	(0.27)	(-1.08)	(-0.25)	(-0.68)	(0.07)	(-0.48)	(2.11)
Post *Year+3*	0.011**	0.040	0.041***	0.004	0.296	1.363	-0.004	0.471	-0.028	0.166**
	(1.99)	(1.09)	(2.74)	(0.96)	(0.61)	(0.75)	(-0.22)	(1.41)	(-0.14)	(2.08)
Post *Year+4*	0.012*	0.025	0.033**	0.000	0.184	2.144	-0.005	0.258	0.027	0.201*
	(1.83)	(0.60)	(2.01)	(0.05)	(0.31)	(0.96)	(-0.20)	(0.65)	(0.10)	(1.95)
Market cap	0.209**	1.792***	0.758***	-0.052	2.476	23.950	-0.391	-1.888	2.971	-0.205
	(2.56)	(3.77)	(3.65)	(-1.64)	(0.24)	(1.21)	(-1.15)	(-0.75)	(1.34)	(-0.88)
Market-to-book	0.005	0.102***	0.017***	-0.002*	-0.154	-0.114	0.012*	-0.152	0.012	0.011**
	(1.62)	(6.84)	(3.43)	(-1.80)	(-0.99)	(-0.38)	(1.81)	(-1.29)	(0.29)	(2.19)
Industry controls	0.140***	0.551***	0.443***	0.118***	0.146***	-0.063	0.015	15.590*		
	(2.84)	(9.55)	(9.05)	(3.17)	(2.81)	(-0.71)	(0.54)	(1.84)		
Observations	2,318	2,312	2,292	2,300	1,448	723	2,460	2,460	2,460	1,039
Adj R-squared	0.681	0.415	0.375	0.624	0.874	0.850	0.907	0.807	0.759	0.593
Panel B: Unsuccessful engagements										
Post *Year+1*	-0.004	-0.019	-0.005	0.003	-0.242	-0.179	-0.009	-0.038	-0.030	-0.009
	(-1.36)	(-0.81)	(-0.37)	(1.33)	(-0.85)	(-0.34)	(-1.07)	(-0.25)	(-0.46)	(-0.87)
Post *Year+2*	-0.003	-0.009	-0.010	-0.004	-0.390	-0.559	-0.007	-0.024	-0.018	-0.019
	(-0.96)	(-0.34)	(-0.76)	(-1.59)	(-1.10)	(-0.98)	(-0.55)	(-0.11)	(-0.16)	(-0.88)
Post *Year+3*	0.002	-0.007	0.009	-0.001	-0.050	-0.207	-0.007	-0.039	-0.042	-0.040

Change in Performance	ROA	Stock return	Sales growth	Stock return volatility	Overall ESG rating	Environment rating	Institutional holding	Pension fund holding	Total investor holding ($)	Lead investor holding ($)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	(0.55)	(-0.23)	(0.63)	(-0.20)	(-0.12)	(-0.30)	(-0.37)	(-0.14)	(-0.27)	(-1.22)
Post *Year+4*	0.004	0.010	-0.002	-0.003	0.121	-0.053	0.012	0.231	-0.071	-0.050
	(0.65)	(0.31)	(-0.13)	(-0.67)	(0.22)	(-0.07)	(0.53)	(0.63)	(-0.35)	(-1.17)
Market cap	0.015	0.409***	0.213***	-0.004	5.914***	9.602**	-0.017	0.769	0.291**	-0.010
	(0.92)	(3.53)	(4.52)	(-0.53)	(3.19)	(2.13)	(-0.17)	(1.46)	(2.10)	(-0.97)
Market-to-book	0.009***	0.118***	0.019***	0.000	0.060	0.290	0.001	-0.147**	0.044***	0.003
	(5.93)	(6.82)	(4.61)	(0.10)	(0.33)	(0.98)	(0.25)	(-2.24)	(4.05)	(0.99)
Industry controls	0.049*	0.558***	0.351***	0.225***	0.149***	0.224***	0.049*	10.657*		
	(1.66)	(11.41)	(7.31)	(5.33)	(3.10)	(2.71)	(1.84)	(1.88)		
Observations	3,226	3,204	3,208	3,202	1,699	1,426	3,389	3,389	3,389	499
Adj R-squared	0.710	0.426	0.302	0.596	0.865	0.812	0.925	0.789	0.699	0.660