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Returns to Hedge Fund Activism: An International Study

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ECGI Working Paper Series in Finance

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Abstract

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Keywords: Shareholder activism, hedge funds, active ownership, institutional investors

JEL Classifications: G32

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Returns to Hedge Fund Activism: An International Study

Abstract

This paper provides evidence on the incidence, characteristics, and performance of activist engagements across countries. We find that the incidence of activism is greatest with high institutional ownership, particularly for U.S. institutions. We use a sample of 1,740 activist engagements across 23 countries and find that almost one-quarter of engagements are by multi-activists engaging the same target. These engagements perform strikingly better than single activist engagements. Engagement outcomes, such as board changes and takeovers, vary across countries and significantly contribute to the returns to activism. Japan is an exception, with high initial expectations and low outcomes. (*JEL* G32)

This paper provides evidence on the incidence, characteristics, and performance of activist engagements across countries. The scope of this paper allows us to address the question of how different patterns of ownership and institutional arrangements influence the growth and performance of activism. Our paper is the first comparative study of publicly observable activism across 23 countries in Asia, Europe, and North America. We analyze 1,740 activist interventions, mainly initiated by hedge funds and focus funds, for the 2000-2010 period. The three largest markets for shareholder activism are the United States (1,125 interventions), Japan (184 interventions), and the United Kingdom (165 interventions). Despite this apparent concentration, activism is a significant phenomenon relative to the size of stock markets in other countries (e.g., Italy). Further, because activists hold limited stakes—11%, on average—they require the support of other investors, including pension funds and other activists. We interpret our results as showing that the pattern of ownership is an important source of influence on activism activity across countries.

Our sample covers 330 different activist funds. Most funds have a clear domestic focus, but foreign engagements account for 24% of the total, roughly equally split between U.S.-based and non-U.S.-based activists, allowing us to compare domestic and foreign models of activism. Hedge fund engagements frequently involve more than one hedge fund ("wolf pack") that may coordinate formally or informally. We estimate that wolf packs are associated with almost one quarter of all engagements and we show that they achieve some of the highest returns for target shareholders.

How do activist engagements perform? The conventional measure of activists' performance is the abnormal return around the public announcement of the activist's stake. We find abnormal announcement returns of 7.0% for the United States during a (-20, 20) day window, which are virtually identical to those reported by Brav et al. (2008) and related studies. The European and Asian

announcement returns are significant at 4.8% and 6.4%, respectively, and are comparable to the United States.

How successful are activists in their engagements with target firms? For this analysis, we identify the outcomes of each engagement, including changes to payout policy, governance, corporate restructuring and takeovers. Compiling data on activist outcomes internationally is particularly challenging; while activists engaging U.S.-listed firms need to provide information on the stated purpose of their investment in Schedule 13D filings, no exact equivalent exists elsewhere. Through extensive news searches, we identify outcomes of the engagements.

For the entire sample, the unconditional probability of an activist being successful in achieving at least one engagement outcome is 53%. However, the incidence of outcomes varies considerably across countries. In North America activists achieve outcomes in 61% of all engagements and 50% in Europe, but only 18% in Asia. Japan, in particular, is a country of unfulfilled expectations with high disclosure returns but very few outcomes.

We also show that the incidence of engagement outcomes and the type of outcome dramatically affect the abnormal returns over the entire engagement, from block disclosure to exit. The announcement of an engagement outcome contributes significantly to holding period returns during the engagement. Abnormal returns around the announcement of outcomes average 6.4% across all countries during a (-20, 20) window, with the highest returns of 8.8% in Europe, 6.0% in North America and 2.7% in Asia. These returns are in addition to the block disclosure returns for the subsample of engagements with successful outcomes. To investigate the potential importance of governance changes initiated by the activist, we test whether engagements with multiple outcomes, for example, a board change or spin-off followed by a takeover, have a higher total return than a single outcome, such as a takeover. The differences are striking, particularly engagements with multiple

outcomes that involve a takeover have abnormal returns of 18.1%, whereas those engagements with only the outcome of a takeover have abnormal returns of roughly half that size (9.7%).

Disclosure returns should reflect the expected value from a successful engagement with an outcome and the expected value from a "no outcome" result, weighted by their respective probabilities. When it becomes clear that there will be no successful engagement, we expect the stock price reaction to the block disclosure announcement to reverse itself. To test this, we compare abnormal returns from the first disclosure date of the engagement by the activist to its disclosed exit for two subsamples of engagements, with and without outcomes.

On an annualized basis using a Fama-French four-factor model, activism with outcomes generates value-weighted abnormal returns over the engagement period of 8.0%, compared with 2.3% for activism without outcomes. When returns are equal-weighted, activism with outcomes generates annualized abnormal returns of just 1.1%, compared with minus 9.8% without. Activism therefore generates positive alpha on average in large firms, but in all engagements the returns crucially depend on the activist achieving outcomes. The differences are economically significant, and usually statistically significant. Our interpretation is that the achievement of outcomes resolves the uncertainty at the block disclosure date about the activist's chances of success.[1] Results by region confirm that outcomes are always crucial for generating positive abnormal returns.

Our results make several contributions to the literature. To our knowledge, we are the first to document the incidence, performance, and specific outcomes of activist engagements for a large cross-section of companies in different countries. We base our analysis on a standardized set of engagements and engagement outcomes that allows us to perform tests across jurisdictions.

[1] We find that fund size, measured by number of engagements during the sample period, does not affect performance. We classify large funds as those having at least 20 engagements in our sample. We test whether large funds exhibit different performance from other funds with respect to initial public disclosure, engagement outcomes, and long-term performance from entry to exit. We do not find any evidence of differential performance.

Second, we extend prior work by Clifford (2008), Klein and Zur (2008), Gantchev (2013), Bebchuk, Brav, and Jiang (2014), Brav et al. (2014), and particularly Brav et al. (2008), and Greenwood and Schor (2009), who analyze the short-term and long-term performance of U.S. target firms. We show that activism outside the United States similarly depends on the activist achieving outcomes. We also show that takeovers that are preceded by governance changes, such as a board turnover or other restructurings, are much more profitable than takeovers on their own. This result extends and modifies the evidence in Greenwood and Schor (2009), who argue that activists "put companies into play."

Third, we use our international data set to compare domestic against foreign activism and U.S. activists against their foreign peers. Most prior research has focused on domestic activism in the United States, and our paper is the first to compare the performance of U.S. activists at home with the performance of U.S. activists abroad, as well as a comparison of other non-U.S. activists at home and abroad. We find that domestic activism outperforms foreign activism, everywhere.

Fourth, our findings complement the prior literature focusing on the role of institutional investors and specifically foreign institutional investors for shareholder value (e.g., Gillan and Starks 2003; Ferreira and Matos 2008; Leuz, Lins, and Warnock 2009; Aggarwal et al. 2009; especially Aggarwal et al. 2011). This paper shows that hedge fund activism is an important channel of influence for institutional investors. Hedge fund activists seek out targets with high institutional ownership; outside the United States, foreign and, in particular, (foreign) U.S. institutions play a key role. The results are consistent with case study evidence that shows that domestic institutional investors are less willing to collaborate with more aggressive U.S. or U.K. activists.

Fifth, we provide the first comprehensive evidence of hedge fund wolf packs internationally. Wolf pack formation is a choice variable for the activist, and conditional on a wolf pack arising, it is the most profitable type of engagement, reflecting the high probability of achieving successful

outcomes. The success of wolf packs is related only in small part to their larger aggregated stakes. This is consistent with highly profitable engagements attracting multiple funds. However, we cannot distinguish whether the superior performance is due to active coordination amongst the hedge funds or simply the congregation of like-minded investors who expect a highly profitable engagement. Our results contribute to the emerging literature on hedge fund wolf packs (see Brav, Dasgupta, and Mathews 2016; Coffee and Palia 2016).

1. Data Description

1.1 Database construction

We construct an international database of hedge fund activist engagements that includes 23 countries from three regions, Asia, Europe, and North America. The data were hand-collected for Asia, Europe, and Canada; for the United States, we relied on 13D Monitor, a commercial provider. The data include the initial disclosure date of the activist block, the block size, the identity, and country of origin of the activist and the date when the engagement was completed. In addition, we collected data on the successful outcomes of each hedge fund activist engagement, in particular on takeovers, other types of corporate restructuring, board changes and changes in payout policy. We describe in the Internet Appendix the search process, the data sources across countries, and how our U.S. data compare to those compiled by Brav et al. (2008).

The final database includes 1,740 publicly disclosed hedge fund interventions in publicly traded firms initiated between January 2000 and December 2010.[2] Figure 1 describes the timeline of a stylized activist engagement from entry (t=1) to exit (t=3).[3] In case there are successful engagement outcomes reported during the holding period, these are classified by type and recorded with their earliest

[2] What we cannot capture is private activism, that is, activism that is disclosed to the target firm, but not to the wider public and because of smaller stakes is not subject to regulatory disclosure.

[3] The number of entry disclosures and exits are reported in Table 11 in the Internet Appendix.

announcement dates (t=2). It is possible that there are multiple outcome announcements, for example, a board change announcement that precedes a takeover announcement.

We combine the hedge fund activist database with data from several other sources. We obtain from the FactSet ownership database (Lionshares) detailed information on the institutional investor holdings for all firms included in our data set.[4] FactSet data are available for 45 countries, including the 23 countries for which we observe at least one hedge fund activist engagement during the sample period. The data cover institutional investors' equity holdings collected directly from fund reports, regulatory filings, and the fund management companies themselves; they include ordinary shares, preferred shares, ADRs, Global Depositary Receipts (GDRs), and dual listings. We rely on the methodology of Ferreira and Matos (2008) to obtain statistics on institutional holdings that include the overall ownership of domestic and foreign institutions, broken down into U.S.-domiciled and non-U.S. domiciled institutions.

To complete the database at the company level, we obtain annual firm financials from Factset Fundamentals, and daily stock prices and trading volume data from CRSP for U.S. firms and from Datastream for non-U.S. firms. At the country level, we collect data on the institutional and legal environment, including *Market cap/GDP*, *Rule of Law*, and *Control of Corruption*; the minimum regulatory disclosure threshold for blockholders; the *Common Law* indicator and the *Revised Anti-Director Rights* index from Djankov et al. (2008) and the G44 *Quality of Governance* index and its components from Aggarwal et al. (2009).

1.2 Activism across countries

Table 1 reports our sample of activist engagements, broken down by country, and a number of country-level metrics related to activism.

4 The FactSet Ownership database has been previously used by, for example, Ferreira and Matos (2008), Ferreira, Massa, and Matos (2010), and Aggarwal et al. (2011).

The 1,740 engagements are unevenly distributed across countries, with 85% concentrated in just three countries: the United States with 1,125 interventions, Japan with 184 interventions, and the United Kingdom with 165 interventions. Six other countries have at least twenty interventions: Germany, Italy, France, South Korea, the Netherlands, and Canada (in declining order). In addition, the table reports summary statistics for all 958 engagements in our sample for which we have FactSet coverage, and for comparative purposes the same data for all other companies with FactSet coverage, in each of the respective countries.

Engagement characteristics vary considerably across countries. First, in several markets multiple activists are involved in the same engagement, that is, wolf packs; they are an important feature of activism in France, Germany, the Netherlands, Sweden, and the United States, where they involve more than 20% of engagements. Second, in a significant proportion of cases, the activist is a foreign hedge fund, and frequently a U.S. hedge fund. For example, in the 53 engagements in Germany, all activists were foreign hedge funds and more than half originated from the United States. In contrast, in the United States, virtually all activists are domestic. The United Kingdom is an intermediate case; a significant proportion of funds are domestic, and most of the remainder come from the United States.

We also find similarities across markets. First, institutional holdings are important because activists hold stakes that are on average 11% and therefore require the support of these investors to put pressure on the company, for example, via board elections. There is significant variation across countries in institutional holdings among the target firms engaged by a hedge fund activist; the median holding in North America is 77% of shares issued, 24% in Europe, and only 7% in Asia. In most countries institutional holdings are larger in targeted firms than in the population of companies recorded in FactSet, as one would expect, and consistent with prior U.S. evidence.

Second, in most countries firms engaged by activists are larger than the median firm in that market. Finland and Spain are the only exceptions, but activism in both countries is low in absolute terms. Third, all jurisdictions in our sample require shareholders to disclose when stakes reach a minimum threshold. We report disclosure thresholds as of the year 2000, and in the vast majority of countries, this threshold is 5% of capital and/or voting rights, depending on the type of security. Germany, Italy, Switzerland and the United Kingdom have lower thresholds of 2% or 3%, while Canada is the only country with a higher threshold of 10%.[5]

While the United States and the United Kingdom have the largest number of engagements, in relative terms activism is less frequent after adjusting for the number of listed companies than in Italy or Germany. Table 2 shows activist activity as engagements per 1,000 listed firms. After the United States, among large economies activism is relatively most frequent in Italy, the Netherlands, Germany and Switzerland (in declining order), none of which are typically labeled as having active markets for corporate control. The table also compares activism to unsolicited takeover bids. While activism differs from hostile takeovers with respect to the size of ownership in the target firm, the comparison is useful since the hostile takeovers are frequently used as a proxy for the level of managerial disciplining in a capital market. In Asia activist engagements exceed hostile bids by 6.4 times (3.2/0.5), in North America by 2.5 times, and in Europe by 1.6 times. Similar results obtain when we annualize activist activity. Overall, activism appears widespread and frequent.

1.3 Wolf packs

Panel A of Table 3 provides further details on engagements involving multiple funds, that is, wolf packs, previously reported in Table 1. The term “wolf pack” is an analogy to a group of wolves attacking prey, where a lead wolf is visible and a potentially large number of pack members are not

[5] To address the potential concern that cross-country differences in disclosure thresholds might create some type of bias in our results, we exclude engagements where the initial activist stake is below 5% from our analysis. This excludes 273 out of 1,740 engagements in our sample. All of our performance results in later tables obtain for this smaller sample.

necessarily visible. The pack members communicate by "howling" (Harrington and Asa 2010). Under U.S. securities laws such a coordinated pack would be considered a group and would have to notify a joint stake. An alternative view articulated by Phil Goldstein, the CEO of Bulldog Investor (a hedge fund activist), is that multiple funds can be found in the same engagement but without coordination, rather like "if you go to a Grateful Dead concert, you're going to find a lot of Grateful Dead fans," he said. "They're not a group. They just like the same music." (*Wall Street Journal*, 4 June 2015). From a legal viewpoint, Coffee and Palia (2016) argue that hedge fund activists have managed to obtain the benefits of pack hunting but the legal treatment of music fans. They define wolf packs as "a loose network of activist investors that act in a parallel fashion, but deliberately avoid forming a "group" under Section 13(d)(3) of the Securities Exchange Act of 1934." Brav, Dasgupta, and Mathews (2016) model the formation of this type of pack, where a loose coalition of smaller investors forms around a lead activist.

The foremost international wolf pack case is the 2005 activist engagement with Deutsche Börse when the lead hedge fund (TCI) sent an e-mail to supervisory board members claiming support from 14 other funds, to abandon an acquisition attempt by Deutsche Börse for the London Stock Exchange. German media referred to this group as an "alliance of locusts" (Pauly 2005). Participants included three hedge funds with publicly observable stakes above the disclosure threshold (TCI, Atticus, and Och-Ziff), eight hedge funds that at the time did not disclose their holdings (Harris, Seneca, Jana, Lone Pine, Third Point, RIT, Alta, and Parvus) and other institutional investors (Capital Group, Fidelity, Generali, and Merril Lynch). Combined, these investors owned 59% of the voting rights. The German securities regulator (Bafin) investigated the case but did not conclude that these funds acted as a group.[6]

6 An example from France serves to illustrate the (rare) case of explicit collaboration between activists: In 2006, Centaurus Capital and Pardus Capital Management successfully engaged Atos Origin, a French information technology company

It is hard to measure the number of such groupings among hedge fund activist cases, because the funds below the regulatory disclosure threshold are not observable, unless they voluntarily disclose their holding. Investors like the Capital Group and Fidelity may or may not support the hedge fund. Hence we use a restricted but empirically robust definition, where a wolf pack is simply defined as a case where multiple hedge fund activists with a disclosed stake are involved in the same engagement. They may or may not coordinate their activities but the disclosure of each fund is at least publicly observable. There are 1,534 unique target companies involved in the 1,740 engagements.[7]

As panel A of Table 3 shows, in 22% of these cases there are at least two hedge funds in the same engagement; of these, 77% involve two hedge funds, while 23% involve three or more. The aggregate stakes held by wolf packs are higher than the stakes held in a single activist engagement, 13.4% versus 8.3%. We examine below the question whether such larger stakes increase the probability of a successful engagement measured by the incidence of outcomes and whether packs have better performance.

1.4 Do hedge funds engage targets internationally?

Panel B of Table 3 separates engagements into foreign and domestic by fund origin. We follow Ferreira and Matos (2008) and consider the geographic origin of both target firm and activists. The panel shows that 76% of the engagements are purely domestic, mostly in the United States. Regarding

(Bessière, Kaestner, and Lafont 2011). Centaurus disclosed a 5.5% stake in October 2006, followed by Pardus with a 7.3% stake in August 2007. In October 2006, the two funds notified a concert party with a joint stake of 19.4%. The market reaction to the disclosures was 7.8% for Centaurus, 1.7% for Pardus, and a further 5.5% for the joint stake. Since both hedge funds notified the authorities that they were acting as a "concert party," their stakes for regulatory purposes were amalgamated, and they were free to coordinate.

[7] The regulatory environment in some jurisdictions is not conducive to such wolf packs because of disclosure, "market abuse," and mandatory bid rules. A comparison of the United Kingdom, the United States, and Germany illustrates this. In the United Kingdom, which has relatively restrictive rules, if one hedge fund informed another hedge fund about its intention to increase its holdings, the latter would be considered an insider and would be prevented from trading in the target's shares. In the United States, which has less restrictive rules, in the same case the second fund generally would not be prevented from trading. In Germany, rules appear to be the weakest, considering that the market regulator found no market abuse in the Deutsche Börse case, although 5 of the 11 hedge funds in the pack were located in the same building in London and three shared an office.

foreign engagements, U.K. funds engage relatively more frequently outside the United Kingdom than do U.S. funds, but the number of foreign U.S. hedge fund engagements is the largest in absolute terms. This is consistent with pattern of institutional ownership; U.S. foreign institutional ownership is the largest in absolute terms. This raises the issue as to whether domestic activists perform better than foreign activists, particularly those originating in the United States and targeting foreign companies. We examine this issue below.

2. International Activism

In all markets, to generate positive returns activists must be able to bring about profitable change in the target company, which is only possible when the fund has sufficient influence. Three key factors can shape this influence: (1) the size of the hedge fund's own stake, (2) support from other shareholders, and (3) the institutions and the legal framework of a country. We review these in turn.

First, hedge fund activists rarely hold large stakes in the target company.[8] For the entire sample, the average stake held during the engagement is 11%. Average stakes vary relatively little across countries: In the three main activist markets, average stakes are 11% in the United States, 13% in Japan, and 13% in the United Kingdom. (Table 1).

Second, due to their relatively low percentage of total ownership, activists depend on support from other shareholders. Block holders, such as families or founders and employee shareholders, will generally support the incumbent directors. Foreign institutional investors, particularly U.S. investors,

[8] The size of the stake acquired by a hedge fund activist in the United States, and thereby its voting power, is typically limited to 10% by poison pill trigger thresholds and Section 16(b) of the Securities and Exchange Act of 1934 that makes the activist liable to pay "short swing" profits back to the company during a given six month period (Coffee and Palia (2016)). Internationally mandatory bid thresholds, especially in Europe (European Commission (2012)), and poison pill style triggers, especially in Japan (Milhaupt 2005, 2009), impose similar constraints. The European Union's Takeover Directive (2004/25/EC) imposes a mandatory bid requirement, typically at 30% or 33% of voting rights. Most countries have supplemented the formal voting power thresholds with "de facto" control criteria that can trigger a bid requirement at lower levels.

are more likely to cooperate with hedge fund activists. A closer examination of important cases from Europe and Asia illustrates the importance of the ownership landscape and investors support.

2.1 Germany: Deutsche Börse (TCI and Atticus)

The previously detailed 2005 engagement of *Deutsche Börse* in Germany by the London-based The Children's Investment Fund Ltd (TCI) was important in demonstrating the ability of a foreign activist fund to successfully engage with a blue chip target outside the United States, provided its demands were supported by a sufficient number of investors. The engagement became possible because *Deutsche Börse* had become a widely held company after its initial public offering in 2001. In 2004 management reported that "93 percent of the shares are now held by institutional investors," 26% from the United States, 24% from the United Kingdom, and 35% from Germany (DB Annual Report 2004). TCI saw the opportunity to solicit the support of these owners.

2.2 France: Euronext (TCI)

TCI employed the same strategy again in 2006 at Euronext, this time putting pressure on the exchange to merge with its rivals DB or the NYSE. On February 15, 2006, almost 76% of the voting rights were controlled by international institutional shareholders. Euronext merged with the NYSE in 2007.

2.3 Japan: J-Power (TCI) and Aderans (Steel Partners)

TCI tried to employ similar tactics at J-Power in Japan starting in October 2006. Thirty-five percent of J-Power's shares were held by foreign institutional investors (Buchanan et al. 2012). TCI nominated two outside directors: J-Power's board refused to support them. In May 2008, the Japanese government refused TCI's request to raise its stake to 20%. TCI launched a proxy contest and purchased positions in ten institutions that were shareholders of J-Power. In June 2008 a majority of shareholders rejected TCI's proposal. The engagement failed because TCI was unable to gain sufficient support from other shareholders, including other activists. However, in contrast, in 2008 Steel Partners

were able to replace the board of Aderans because the fund held a 24.6% stake, and they had the support of State Street Banks and Trust that held a 16.3% stake (Greenwood and Schor 2009).[9]

2.4 South Korea: KT&G (Carl Icahn and Steel Partners)

In South Korea, Carl Icahn engaged KT&G, the country's largest tobacco and ginseng group, in January 2006. He acquired a 6% stake and was supported by Steel Partners. KT&G was widely held and 60% of its shareholders were foreigner investors. Carl Icahn managed to appoint a director and KT&G accepted nearly all of Icahn's demands. He sold his stake with a 44.2% net return at the end of the year (*Financial Times* 2006; Kim 2008).

In the case studies considered above, the presence of (foreign) institutional investors is crucial in determining the outcome. The general trend in institutional ownership between 2000 and 2007 in many Asian and European markets is consistent with the case study evidence. The value of foreign equity holdings of U.S. institutions increased more than threefold between 2001 and 2007 (Department of the Treasury 2008). In 2005, U.S. institutional investors held 65% of the total US$18 trillion in equity positions held by 5,300 institutions in 27 countries in the FactSet/Lionshare database (Aggarwal et al. 2011, Table A3). The percentage of total market capitalization held by foreign institutions exceeded 20% in 14 of these markets.[10] At the company level, foreign holdings are even higher in widely held companies, as illustrated by the case studies of Deutsche Börse and Euronext.

Finally, institutional and legal characteristics of a country may influence activism. Prior research suggests that several dimensions of country characteristics might be important for hedge fund activism. For example, the anti-director rights index in Djankov et al. (2008) has as one of its components whether shareholders have the right to call a special meeting and propose candidates for

[9] The 24.6% stake was just below Aderans' 30% poison pill threshold.

[10] A comparison of data on foreign holdings of U.S. institutions published by the U.S. Treasury shows holdings of U.S. institutions that are even higher than those reported by Factset: Factset reports total foreign U.S. equity holdings of US$ 2,001 billion in December 2005 (Ferreira and Matos (2008), Table A2), compared with US$ 3,318 billion for the same month and year (Treasury International Capital Survey (2005), p. 3).

election to the board. Across countries, shareholders may require as little as 5% or as much as 20% to exercise this right (the United States/Delaware being an exception, where shareholders generally cannot call an EGM, but can launch a proxy fight). Differences in anti-director rights should therefore affect the ease with which activists can engage. Other country characteristics that are likely to matter are institutional ownership, board composition, governance quality, reporting regulations for ownership, among others. We investigate the importance of these country characteristics, which significantly vary, in our analysis below.

3. Results

In this section we describe four sets of our results. First, we report the probability of a firm becoming a target of an activist in a given country, conditional on target characteristics. Second, we calculate various metrics of performance of engagements, measuring the target's abnormal returns around the initial block disclosure by the activist, the probability of occurrence of different successful outcomes during the engagement, the abnormal returns around the announcement of these outcomes, and the long-term abnormal returns for the entire engagement period from entry of the activist to exit. Third, we examine the influence of the nationality of the activist, domestic, foreign or foreign-U.S., on the success of the engagements. Fourth, and finally, we examine how country specific characteristics affect activism performance and outcomes.

3.1 Likelihood of engagement across countries

We investigate what factors affect the probability of an engagement by an activist hedge fund. Table 4 reports probit regressions, where the dependent variable is a dummy indicating whether a firm is engaged by an activist or not in a given year. We control for firm characteristics, such as size (market

cap), leverage and market to book, a firm's accounting standards, index membership, illiquidity of target firm shares and institutional ownership (domestic and foreign). Institutional ownership is important since, as discussed earlier, we expect that institutional investors, particularly those from the United States, increase the probability of an activist engagement. Index membership and illiquidity are correlated with institutional ownership but might also have a direct effect on activists' decision to engage a target. We report results using two different samples: The "All countries" sample in Columns 1 and 2 covers 45 countries and 25,018 firms, including 22 countries without any recorded activist events (from Column 2 onward, we require nonmissing data also for *Illiquidity*, reducing sample size). The "Only activist markets" sample in Columns 3 and 4 is limited to markets with at least five engagements during the sample period. All columns include year fixed effects, and Column 4 additionally includes country fixed effects.

The results in Table 4 confirm that institutional ownership is strongly correlated with the level of engagements at the firm level within a country, particularly if the institutional investor is U.S.-based. We thus confirm and extend prior evidence by Brav et al. (2008), who show that for U.S. domestic engagements, institutional ownership increases the likelihood of activist engagements. When we partition institutional ownership by domestic, foreign-U.S., and foreign non-U.S., two of the variables (domestic and foreign-U.S.) are significant at the 1% level and foreign non-U.S. is significant in two out of the three regressions at the 1% or 5% level. For all countries, foreign-U.S. ownership is almost twice as important as domestic ownership; for countries with at least five engagements (Regressions 2 and 3), it is more important than foreign non-U.S. by a factor of between 2.5 and 4.5 times.

In a separate set of results reported in the Internet Appendix (Table 15), we interact institutional ownership with indicator variables for the seven countries with the highest absolute number of activist engagements, to test whether the role of institutional investors differs across markets. We find that Germany, France, and the United Kingdom have similar characteristics—foreign institutional investors,

and particularly those from the United States, have a larger impact on engagement probabilities. Japan is similar to these three countries insofar as foreign U.S. investors make activism more likely; in contrast, domestic Japanese institutions have a dampening effect on shareholder activism. Italy is similar to Japan, with less activism when domestic institutional holdings are higher and foreign (U.S.) institutional holdings are lower.

Considering how firm characteristics relate to activist engagements, Table 4 yields two additional insights. First, controlling for other factors, firm size has little effect on engagement probability. While Brav et al. (2008) find that engagements are concentrated among smaller firms in the United States from 2001 to 2006, this study finds that hedge fund activists around the world appears to be less constrained by the size of market capitalization of the target firm. Second, broadly consistent with Brav et al. (2008) and other prior U.S. findings, activists behave as value investors in their choice of targets. Those targets have lower market-to-book, higher payout ratios, lower investment, and higher cash balances.

3.2 Engagement announcement returns

The first measure of engagement performance is the cumulative abnormal return around the initial disclosure of the activist engagement, measured across all jurisdictions. Table 5 reports the market-model adjusted abnormal returns around the disclosure date for two event windows, 21 days and 41 days (1,617 out of 1,740 engagement disclosures have sufficient data available; market models are country specific). In panel A, for the aggregate sample, average abnormal returns are 6.4% for the (-20, 20) window, and 6.1% for the (-10, 10) window, significantly different from zero at the 1% level.[11]

[11] We alternatively calculate simple market index adjusted returns. Returns in this case are, on average, 1.3 percentage points lower and significant at the 1% level or better.

There is some variation across the three regions. For the (-20, 20) window in panel A, North America has the highest disclosure returns at 7.0%, followed by Asia at 6.4% and Europe at 4.8%. North American abnormal returns are virtually identical to those reported for the United States by Brav et al. (2008) for the 2001-2006 period.[12] As Figure 2 shows, there is some post-disclosure drift in abnormal returns in all three regions. Also shown is high abnormal share turnover (calculated relative to average turnover prior to the event window) around the activist engagement disclosure event; it increases by more than 80% over normal turnover prior to the event period, which in part reflects the stake purchases of the activist and, in some cases more than one activist.

Focusing on the time series of disclosure returns for the full sample and by region, panel B of Table 5 shows they are on average higher in North America during the early 2000s than during the late 2000s (10.5% versus 5.8%, respectively), but in Europe the pattern is reversed. The years 2003 and 2004 in Asia stand out, with abnormal returns above 15%. These engagements include some of the most high-profile ones initiated by Steel Partners and Murakami in Japan and Sovereign Asset Management in South Korea.

Panel C compares disclosure returns of stand-alone engagements with those of wolf packs, that is, multiple activists engaging the same target. The results show that disclosure returns for multiple engagements are strikingly higher at 13.8% compared with stand-alone deals at 6.3% (-20, 20 event window). While it is possible that joint voting power of the hedge funds may contribute to these high returns through higher outcome probabilities, it is also plausible that wolf packs form in response to highly profitable engagements.

[12] Further, while Brav, Jiang, and Kim (2015) find that disclosure returns in U.S. targets are declining over time, and Krishnan, Partnoy, and Thomas (2015) document larger disclosure returns in the United States from 2008 onward. The Internet Appendix provides a summary of disclosure returns from prior single-country studies of the United States, France, Germany, Italy, Japan, and the United Kingdom. See Brav, Jiang, and Kim (2010) and Denes, Karpoff, and McWilliams (2016) for recent surveys of the activism literature.

We show below that these dramatically higher disclosure returns of wolf packs reflect much higher probabilities of successful outcomes. First, however, we investigate whether the higher disclosure returns of wolf packs are attributable to the larger stakes that they control: The aggregate ownership stakes held by wolf packs are significantly larger than those of stand-alone activist engagements. At the beginning of an engagement, stand-alone activists hold an 8.0% stake on average, while wolf packs, in aggregate, own 13.4% (unreported in the table).

To investigate whether higher disclosure returns of wolf packs are attributable to these larger stakes, in panel D of Table 5, we regress announcement returns on activist stakes and three alternative wolf pack measures. The first, *Wolf pack (1/0)*, is a dummy for an engagement that involves a wolf pack (1) or does not (0). The second and third variables attempt to remove the correlation between wolf packs and the size of their stakes. This helps separate the size of stake (more voting power) from a potential coordination effect that would be directly observable if a group or concert party had been notified. The second variable, *Residual wolf pack (Start)*, is defined as the residual from a regression of *Wolf pack (1/0)* on *Stake held by activist (Start)* as well as announcement year and country fixed effects. The third variable is *Residual wolf pack (High)*, which is the residual from the same regression using instead the maximum stake during the engagement, *Stake held by activist (High)*.

The results for both event windows and for all three measures of wolf pack status are consistent: While activist stakes, as expected, have a positive effect on disclosure returns, the effect of wolf packs is largely independent of the larger stakes they control. Controlling for activist stake size, wolf packs for the (-20, 20) window continue to have between 6.4% and 7.0% larger disclosure returns than stand-alone engagements.

Finally, in panel E of Table 5, we analyze the performance of domestic and foreign activist engagements. We compare the performance of U.S. activists at home against their performance overseas, and against their foreign peers, who themselves engage both domestic and foreign targets.

We find that disclosure abnormal returns for domestic engagements are 7.0% during the (-20, 20) event window for domestic engagements compared with 3.6% to 3.8% for foreign engagements. Again, domestic engagements are similar for U.S. and non-U.S. activists. This suggests that domestic activism may be more profitable than foreign activism if engagement costs are similar.

3.3 Outcome probabilities and disclosure returns around outcomes

Table 6 reports the total number of all successful outcomes, grouped by year during which the outcome is announced. Outcomes are categorized as "Board" (replacement of the CEO, CFO, Chairman, or Nonexecutive directors), "Payout" (share buybacks or increased/special dividends) and corporate restructuring. We separate restructurings into "Takeover" (the target firm is acquired by a strategic buyer or private equity fund), and "Restructuring" (divestitures and spin-offs of non-core assets, and the blocking of diversifying acquisitions).[13] These categories are based on the internal classification of engagement outcomes by one of the largest hedge funds in our sample (see Becht et al. 2009). They are broader than those typically used in studies of domestic U.S. engagements (see, e.g., Brav, Jiang, and Kim 2009; Greenwood and Schor 2009), and necessitated by having to identify outcomes consistently across many countries from non-standardized news reports.

The impact of the financial crisis on activist engagements is significant. First, the steady increase in the global number of simultaneously ongoing engagements from 2000 onward peaks in 2007 and declines every year afterwards (in Asia the peak is in 2008). Second, the total number of outcomes drops, in Asia from 17 in 2007 to 9 in 2008 and further to 5 in 2009, with similar declines in Europe and North America. Third, since outcomes decline faster than the stock of engagements, the

[13] We verify for all 1,740 engagements whether SDC reports takeover attempts by third parties on the respective target firm. We identify 21 announcements of takeover outcomes in our sample (15 are in the United States), where a third party and not the activist may be responsible for the subsequent takeover. When we alternatively drop these 21 outcomes from our sample, our results and conclusions are materially unaltered.

probability of achieving successful outcomes per engagement declines after 2007. The decline is spread unevenly across types of outcomes: the number of successful board outcomes continues to be relatively high while the number of takeovers associated with the activist engagement sharply declines. In Asia, where successful takeover outcomes are infrequent throughout the sample, there are no activist successes after 2007. This is also related to two important activist failures, Steel Partner's engagement of Bull-Dog Sauce and TCI's engagement of J-Power, that seriously undermined the prospects of confrontational activism in Japan. We discuss these cases in the Internet Appendix. In Europe successful takeover outcomes drop from 10% of all ongoing engagements in 2007 to 3% in 2008 and do not recover, with similar numbers for North America.

Next, we examine the disclosure returns around outcome announcements. These returns were already partly anticipated by the initial block disclosure returns. The abnormal returns around the disclosure of activist engagements should reflect the probability and potential profitability of successful outcomes from the engagement. If investors correctly assess the probability of engagement success on average–ex ante, abnormal disclosure returns are higher for engagements with subsequent successful outcomes than for engagements without any outcomes. This is exactly what we find with 7.9% block disclosure returns for engagements with successful outcomes and 4.7% for engagements without outcomes (for the (-20, 20) window); the difference is statistically significant at the 1% level.

We would expect engagements with observable outcomes to be associated with additional post-disclosure abnormal returns, and those engagements without outcomes to be associated with losses post-disclosure. We therefore analyze the cumulative abnormal returns around the disclosure of observable outcomes of engagements. Since we can only measure these returns for successful engagements, we also provide below a comparison of the long-term performance of successful and unsuccessful engagements.

Table 7 reports abnormal returns for all outcomes, again for (-10, 10) and (-20, 20) event windows. Out of 1740 engagements, 880 have at least one subsequent outcome and of those 850 have sufficient data to calculate abnormal returns. A significant number of engagements, 139 in total, achieve multiple outcomes, for example a takeover preceded by a board change or another type of restructuring. As well as reporting returns for engagements with multiple outcomes, we split them further into outcomes that include a takeover of the target ("Multiple+Takeover," 58 engagements), and those which do not ("Multiple+NoTakeover," 81 engagements).

In panel A, the average abnormal return for all announced outcomes for the 41-day window is 6.4% and is statistically significant at the 1% level. The largest abnormal returns are generated by takeover transactions that also involve other outcomes, at 18.1%. An important feature of this table is that engagements with multiple outcomes are on average significantly more profitable, that is, have larger returns than single outcomes, regardless of the type of outcome. Takeovers involving other outcomes are likely to be the most profitable because the activist has to remove an obstacle, for example incumbent members of the board, which may have depressed the stock price. This evidence qualifies the results by Greenwood and Schor (2009) who provide evidence that a large proportion of activist returns are the result of "putting companies into play"; our evidence suggests that while activists might be good at picking likely takeover candidates, their other actions might also influence the probability of takeover, in particular since the other actions usually precedes the takeover bid. It might be necessary, for example, to replace board members to make the activist target more amendable to a partial or outright sale.

All other types of outcomes have smaller abnormal returns. Restructurings that are not takeovers, including divestitures and spin-offs, average 5.6%. Payout is not distinguishable from zero at -0.2%. Board changes generate abnormal returns at 4.5%. These results show that engagements,

conditional on successful outcomes, have much higher levels of returns than those shown at the disclosure date.[14]

There are also interesting differences in outcomes returns across region, in panel B. In Asia, there are very few engagements with outcomes and the outcome returns, except for two engagements with multiple outcomes, are small and for the (-20,20) window all returns are insignificant. Such a low probability of successful outcomes and the low associated returns suggest that the large abnormal returns in Asia at disclosure proved optimistic.[15] In Europe, outcomes are much more frequent and they have the highest average abnormal returns across the three regions with 8.8% for the (-20,20) window. Pure-play takeovers and takeovers involving other outcomes stand out with 10.8% and 25.1%, respectively. Restructuring outcomes have returns of 5.3% and engagements with multiple outcomes (but no takeover) have 10.3%.

In North America engagements have the highest probability of achieving outcomes, the average abnormal return is 6.0% and, like in Europe, takeovers on their own and with other outcomes stand out with the largest positive returns of 9.5% and 16.2%, respectively. These results are consistent with those of Brav et al. (2008) and Greenwood and Schor (2009) for U.S. domestic engagements.

[14] In additional tests, we find that the individual outcomes of multiple outcomes are valued similar to single outcomes. For example, across all sample engagements, board changes generate roughly 4.5% abnormal returns, and restructurings generate roughly 5.5%, while board change plus restructuring generates roughly 10%. Therefore, engagements that generate multiple outcomes are more valuable not through making each outcome more valuable, but through generating more outcomes.

[15] Japan is a special case. Ownership structures are prima facie conducive to activism; the average Japanese firm is widely held and foreign ownership has increased over the sample period. More importantly a former civil servant, Murakami Yoshiaki and various vehicles set up by him, loosely referred to as "Murakami Fund," achieved a number of early successes employing confrontational activist tactics. Following this, several foreign activist funds entered the Japanese market: Dalton in 2001, Steel Partners in 2002, TCI in 2005, Ichigo in 2006, and Perry in 2007. Steel Partners and TCI adopted a confrontational style, and Steel Partners had some early success. However, the well-documented 2007 Bull-Dog Sauce and 2006-2008 J-Power cases cast doubt on whether confrontational activism can work in Japan. Some activists argue that changing attitudes among Japanese institutional investors and increasing foreign holdings can lead to successful and very profitable hostile engagements. An alternative type of private dialog-based activism is taking hold: Buchanan, Chai, and Deakin (2013) report the arrival of "quiet activism" in Japan and private discussions we have had with a U.K. hedge fund, Governance for Owners (GO), match this account. GO set up a joint venture with Japanese investors with the explicit objective to engage in private. These are developments that post-date the end of our sample period. To investigate this "new form" of activism in Japan will require data on private activism like the data that Becht et al. (2009) obtained for the Hermes UK Focus Fund and which is currently not available to us.

Restructuring outcomes and engagements with multiple outcomes (but no takeover) have returns that are comparable to Europe. Overall, the stock market responses to observable outcomes are similar for North America and Europe.

Panel C examines further those 58 engagements with multiple outcomes that involve a takeover (Multiple+Takeover). If governance changes facilitate eventual takeovers, one would expect the announcement of other outcomes to precede the announcement of takeover outcomes during an engagement, and the results confirm this to be the case. Engagements with multiple outcomes last 806 days on average, and takeover outcomes are announced significantly later than all other types of outcomes. Board change announcements instead precede them and are announced about one-third into the average life of such engagements; payout changes and restructurings are announced roughly at half-time; and takeover outcomes are announced about three quarters into the engagement period.[16]

Next, we compare outcome probabilities and announcement returns between engagements for wolf packs and single activists. In this comparison, we treat the wolf pack as a single engagement and consider any achieved outcome only once, thus avoiding double counting. As panel D shows, the higher disclosure announcement returns for multiple engagements coincide with a much higher incidence of outcomes achieved for these deals: The probability of achieving at least one outcome is 46% for stand-alone engagements, while it is 78% for multiple activist engagements. The higher probability of achieving outcomes is mostly reflected in board changes, but all categories of possible outcomes are higher for multiple engagements than for stand-alone activists. In addition, the proportion of the most profitable outcomes (takeovers and restructurings) is a higher proportion of total outcomes than in the case of stand-alone engagements (40% versus 30%). Note that the abnormal returns around successful outcomes are not higher for wolf packs than for stand-alone engagements; wolf packs

16 Takeover outcomes refer to the announcement of the takeover, not its completion, so it is possible that there are additional outcomes following takeover announcements.

therefore have higher probabilities of outcomes, but not higher return upon outcome announcement. Overall, wolf packs have higher announcement returns on disclosure of a stake (compared with stand-alone activists), higher probabilities of achieving the outcomes they seek, and achieve more of the most profitable types of outcomes, that is, takeovers and restructurings.[17]

Finally, given our observation that U.S. institutional investors are an important influence on the level of activism in non-U.S. countries, it is reasonable to ask whether U.S.-style activism explains activism performance. We know that U.S. hedge fund activists successfully cooperate with U.S. institutional investors in the United States. We investigate whether this cooperation explains successful engagements in other countries.

We first compare the performance of U.S. activists at home against their performance overseas, and against their foreign peers, who themselves engage both domestic and foreign targets. Table 7, panel E, reports engagement performance partitioned by the four categories of activist-target pairings. Among activists across all countries, U.S. activists targeting domestic firms have significantly higher probabilities of achieving an outcome, which is not surprising given our earlier results on outcomes in the United States. However, this advantage is not one of U.S.-style activism per se, as it does not carry over to U.S. activists targeting firms abroad, who are not different in their success rates from other foreign activists. While domestic activism (outside the United States) has higher disclosure returns than foreign activism, it does not have a higher probability of outcomes. Therefore, the superior performance of U.S. domestic activism seems to be related to its ability to generate more outcomes.

We now turn to the degree to which hedge funds specialize in their choice of geography of target. In Figure 3, we provide a histogram of the proportion of funds' engagements that are foreign,

17 We order activists by entry time for the same target and find (-20, 20) disclosure returns of 7.8% (*t*-statistic 5.82) for the first activist, 4.9% (*t*-statistic 3.10) for the second activist, and 7.1% for the third activist (*t*-statistic 1.50). Subsequent disclosures to the first activist therefore still generate large abnormal returns. While this evidence is consistent with sequential learning through activist entry, it may also be that multiple engagements increase the probability of outcomes and thereby increase the profitability of the engagement.

based upon a subsample of funds with at least ten engagements. As the distribution shows, the vast majority of funds specialize in engaging only firms in their respective domestic home markets. A minority of funds engages in foreign markets, among which a significant proportion exclusively engage in foreign markets. Few funds engage both domestic and foreign targets. The degree of specialization is even more pronounced—with relatively more funds investing only either in domestic or foreign engagements—when we consider all 330 funds in the sample (data not shown).

To better understand this specialization of funds, we consider the engagement performance of the subsample of U.S. hedge funds which invest in targets both domestically and overseas. This provides evidence about the extent to which the success of a domestic engagement model can translate into successful foreign engagements. There are 24 hedge funds in our sample which engage with both domestic and foreign targets, out of a sample of 261 U.S. hedge funds. These include some of the largest funds in the sample by number of engagements, Steel Partners, ValueAct Capital Partners, Carl Icahn, and Third Point. We compare, for each such fund, the probability of achieving outcomes in foreign engagements to the probability of achieving outcomes in domestic engagements. We find a strong negative correlation between both probabilities for the sample of 24 hedge funds, suggesting that success domestically does not translate into success overseas, and vice versa.[18]

3.4 Total engagement returns

To obtain measures of the overall performance of an engagement we measure the returns of activist engagements over the holding period of the activist. This enables us to compare the profitability of engagements with and without observable outcomes.

We construct activist portfolio returns in calendar time. The portfolios are rebalanced each month to include all firms in the month that are subject to an ongoing activist engagement. Equal- and

[18] Figure A4 in the Internet Appendix shows a plot of these 24 funds.

value-weighted portfolio raw returns are in the Internet Appendix. The portfolios' excess returns are regressed on the excess return of the market and the four-factor Fama and French (1993) and Carhart (1997) mimicking portfolios. To illustrate for the four-factor model, we regress

$$R_{p,t} - R_{f,t} = \alpha_P + \beta_{P,RMRF}(R_{m,t} - R_{f,t}) + \beta_{P,SMB}SMB_t + \beta_{P,HML}HML_t + \beta_{P,MOM}MOM_t + \varepsilon_{P,t},$$

where *RMRF*, *SMB*, *HML*, and *MOM* are the excess return of the market, the difference between a portfolio of small stocks and big stocks, the difference between a portfolio of high book-to-market and low book-to-market stocks, and the difference between a portfolio of high and low momentum stocks, respectively, all based on U.S. stocks. We also estimate specifications where the excess returns of the activist portfolio are regressed on excess returns of a region's market, where the regional market excess returns are weighted averages of the sample countries in that region, net of the U.S. risk-free rate. Alpha or $\alpha_{P,}$ is the estimate of monthly abnormal performance of the target portfolio. [19]

In Table 8, panel A, reports equal-weighted and value-weighted results for annualized Alpha for engagements with at least one outcome, for engagements without any outcome, for the long/short portfolio that holds the portfolio of engagements with outcomes and sells short the portfolio of engagement with no outcomes, and for all engagements combined. The long/short portfolio serves to illustrate the magnitude of return differentials between successful and unsuccessful engagements, but ex ante does not represent an investable strategy.[20]

[19] For delisted firms, returns are used until the last month before delisting. For each portfolio, we require a minimum of five firm returns in each month and replace monthly portfolio returns with fewer than five firms with the excess return of the market (replacement biases our results against finding abnormal performance; depending on the portfolio, replacement is for 39 or 49 months for Asia, 5 or 10 months for Europe, and 4 or 5 months for North America). Factor portfolios in all regressions are based on U.S. stocks. We also estimate MktModel specifications in which excess returns of the activist portfolio are regressed on region-specific excess returns of the market (based on weighted averages of country stock market indices of all sample countries in each region). Results are similar, omitted for brevity, and available on request.

[20] We alternatively report results calculated over one-, two-, and three-year fixed intervals in Table A17 in the Internet Appendix. For example, the results for the Carhart four-factor model show that the abnormal return is roughly equally spread across the first three years of an engagement.

With equal-weighting, activist engagements with successful outcomes produce annualized positive abnormal returns of 8.4% (MktModel) and 1.1% (Carhart) for the entire sample, while engagements with no outcomes have abnormal returns of -5.5% (MktModel) and -9.8% (Carhart) and thus underperform similarly risky stocks. The long/short portfolio's return is 13.9% and 10.9%, respectively, significant at the 1% level. The overall performance of activism for the pooled sample is not significantly different from zero, in line with prior U.S. evidence. We find similar results when we split portfolios by region. Significance levels remain high, as deals with outcomes continue to generate positive abnormal returns in all regions, while deals without outcomes generate zero or negative abnormal returns. Value-weighted abnormal returns increase overall, to 11.3% and 8.0%; statistically significant at the 1% and 5% level for engagements with successful outcomes. For engagements without outcomes, abnormal returns are 4.0% and 2.3%, neither of which are significant. The main conclusion is that the difference in performance between outcomes and no outcomes is always economically large and frequently statistically significant.

Larger target engagements even with no outcomes on average exhibit positive performance, which leads to the long/short portfolio return being insignificant in the value-weighted specifications. We investigate this latter finding in more detail, particularly in light of prior U.S. evidence in which equal-weighted returns consistently outperform the value-weighted returns. Specifically, we investigate whether this is a recent phenomenon, as hedge funds in recent year have engaged some of the largest firms worldwide. Consistent with this, during our sample period average market capitalization of targeted firms increases from US$ 600 million in 2000 to US$ 3.4 billion in 2010. In unreported results (available on request), we split our sample into alternative sub-periods; first, using two equal time periods (January 2000-June 2005, July 2005-December 2010), and second using a structural break (October 2008) in the time series for Asia and Europe identified from Chow tests into pre- and post-break periods (January 2000-September 2008, October 2008-December 2010). For the entire sample

we obtain two results, robust to as to how we split the time periods: First, the activist portfolio returns, both equal- and value-weighted decline over time. Second, relative to small engagements, the performance of large engagements *improves* over time. The outperformance of large engagements therefore appears to be a recent development.[21]

To generate insights into what drives the abnormal performance during the activist engagements, in panel B we decompose the returns over the engagement period into three portfolios: a portfolio containing only the disclosure months, that is, "*Only months t=0*"; a portfolio containing only months during which outcome announcements are made, that is, "*Only months with outcome announcements*"; and a portfolio that contains all other months, that is, "*All other months.*" There are two main results. First, engagements have significantly positive alphas both in the month of initial disclosure of the activist stake and in those months where successful outcomes are announced. While these are not investable strategies for outsiders, the annualized alphas from these portfolios are significant and range from 14.2% to 18.9% for the "*Only months t=0*" portfolio and from 26.4 to 28.2% for the "*Only months with outcome announcements*" portfolio. Second, in months after the block disclosure and excluding the outcome disclosure month(s), there are no significant abnormal returns generated by the activist, positive or negative.

Overall, the results confirm that activist engagements without outcomes generally do not generate significant shareholder value under any specification. Engagements with outcomes however generate value for shareholders, with value generation being closely linked to these outcomes. It is unlikely that this consistent pattern across regions is a coincidence. These results suggest that activism is frequently not just about stock picking but also changing the governance of a company.

[21] We also find that the relative performance improvements in large engagements over time are most pronounced in those engagements *without* observable outcomes. Our data do not allow us to test why activist engagements without observable outcomes generate (relatively) superior performance. One conjecture is that activists, particularly in large firms, increasingly may be able to change how investors perceive firm value via outcomes that are more subtle and harder to measure than those specified by us.

3.5 Country differences in activism

Our evidence so far indicates that shareholder activism is successful in generating positive returns for target shareholders across countries. There are common themes: Activists are more likely to engage targets that have foreign institutional investors, in particular from the United States; activists generate positive abnormal returns if and only if they manage to achieve successful outcomes; and the value of achieving an outcome depends significantly on the exact nature of the change implemented by the activist.

Finally, we consider whether country-level measures of economic development, the legal system and governance affect activist engagements and their success, and also consider the impact of institutional ownership. In Table 9 we report three sets of tests. First, in Columns 1 to 3, the dependent variable is the disclosure abnormal return. We control for firm-level characteristics as in Table 4, and for year fixed effects (entry year). Since we require firms to have coverage on FactSet for these regressions, our sample reduces to roughly 900 observations. As the results show, none of the country-level measures are statistically significant, and also institutional ownership is insignificant. Disclosure returns therefore neither depend on country characteristics nor on the cross-sectional differences of institutional holdings. The lack of significance is not too surprising, since disclosure abnormal returns are conditional on the activist choosing to go ahead with an engagement. For example, since activists will have considered institutional ownership in picking targets, targets should have conditionally optimal institutional ownership; ownership would then appear unrelated to announcement returns.

Second, in Columns 4 to 6, the dependent variable is the abnormal return in response to the disclosure of successful outcomes. For engagements without successful outcomes we assume an abnormal return of zero (alternatively excluding all observations with no outcomes does not change the results). These regressions are very similar in the sense that neither institutional ownership nor country-level characteristics have meaningful explanatory power for whether hedge fund activists generate

successful outcomes. However, we do find that institutional ownership has a significant correlation with the *number* of outcomes achieved in an engagement (results are shown in Table 18 in the Internet Appendix); specifically, the total number of outcomes increases with ownership by domestic and foreign U.S. institutions. When we further test which outcome types are related, we find that board outcomes increase significantly with domestic and foreign U.S. ownership, restructurings increase with domestic ownership, but other outcome types do not increase, and foreign non-U.S. ownership even appears to have a negative relation to restructurings.[22]

Third, in the remaining six columns, the dependent variable is a measure of whether a firm is engaged by an activist or not (we have shown regressions with this dependent variable in Table 4). We show a firm-level version of the regression where the dependent variable is a dummy for a firm engaged by an activist in year *t* (1) or not engaged (0) in Columns 7 to 9, and we show a country-level version where the dependent variable is the percentage of firms being engaged by activists, for a given country in a given year, in Columns 10 to 12. For Columns 10 to 12, we use the aggregated sample from Columns 7 to 9; that is, all firm-level variables are averaged for each country-year. Since the dependent variable is a fraction, we estimate Columns 10 to 12 by GLM following Papke and Wooldridge (1996). The results show that activists are more likely to target firms in countries where the rule of law is strong; consistent with this, activism is rare in emerging markets. Further, activism is more frequent in those developed countries (e.g., France, Germany, and Italy) in which minimum regulatory disclosure thresholds for blockholders are low, the legal system is different from Common Law, and governance is relatively weak. The coefficients for investor protection and board structure are ambiguous, with sign changes.[23]

[22] See also Appel, Gormley, and Keim (2016), who find that a larger share held by passive institutional investors in the United States is related to a higher likelihood of (U.S.) activists achieving board outcomes.

[23] Weak governance and independent boards are not necessarily inconsistent. For example, Italy requires that companies with block holders appoint special board members that represent minority shareholders.

Our interpretation of these results is that while in absolute numbers activism is most prevalent in the United States and the United Kingdom (Common Law countries), relative to the number of listed companies it is most prominent in developed countries with Non-Common Law legal systems, accompanied by weaker governance. It may be that such targets provide greater potential for improvement from an activist point of view. Moreover, as our case studies on France and Germany illustrate, activists in those countries target companies with relatively dispersed ownership, where blocks are largely absent and that are more susceptible to the votes of foreign institutional shareholders.

In summary, country characteristics matter for the decision of activists to engage a target, and for whether an outcome is achieved. However, conditional on observing an engagement, country characteristics do not correlate with measures of financial performance, such as initial disclosure returns and outcome disclosure returns.

4. Conclusion

Our paper provides large-sample evidence about the incidence and performance of international hedge fund activism. The average share stake held by activists is 11% across countries. As a consequence, activists must seek the support of other institutional shareholders or engage alongside other activists. Success of the activist business model appears to crucially depend on the activist achieving outcomes. We show that engagements with outcomes exhibit positive and significant abnormal performance for the entire engagement period, while activist engagements without outcomes do not; the differences are economically large and usually statistically significant. The most profitable outcomes are takeovers that are often preceded by governance changes, such as board restructurings. They signal that the outcome is a consequence of action taken by the activist and may not occur without engagement.

Institutional investors are related to the incidence of activism across countries. However, foreign institutions, particularly those that originate in the United States, play a more important role than domestic institutional investors in activism. The increase and spread of U.S. foreign institutional holdings has significantly contributed to hedge fund activism becoming a global phenomenon.

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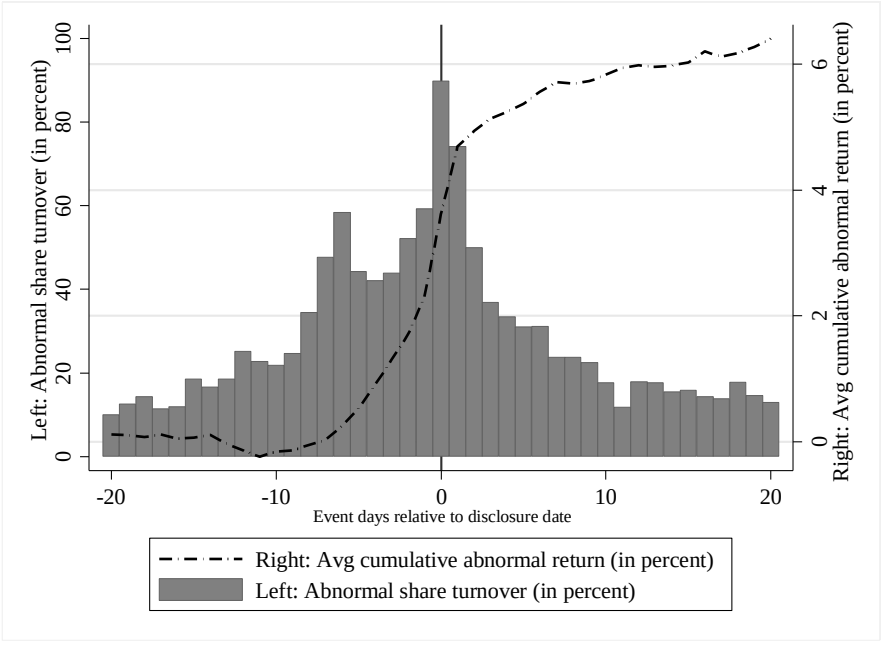
Figure 1
Activist engagement time line

t=1: Block disclosure (regulatory or voluntary) - engagement assumed to start
t=2: Engagement outcomes
t=3: Block reported to be sold - engagement assumed to end

Figure 2
Cumulative abnormal returns around disclosure of activist engagements

The dotted line (right axis) shows average cumulative abnormal returns around the initial filing date or the first press disclosure date of engagements, market model adjusted. The event window is (-20, +20) days, where day zero corresponds to the filing or press disclosure date. Factor loadings are estimated over 250 trading days preceding the event window, using country-specific domestic market returns, with a minimum of 150 daily observations (1,617 out of 1,740 sample deals have sufficient data). The bars (left axis) show abnormal trading activity in the target's equity during the event window, where trading activity is abnormal share turnover calculated relative to average turnover during 250 trading days preceding the event window. Abnormal returns and abnormal trading activity are winsorized at the 1st and 99th percentiles.



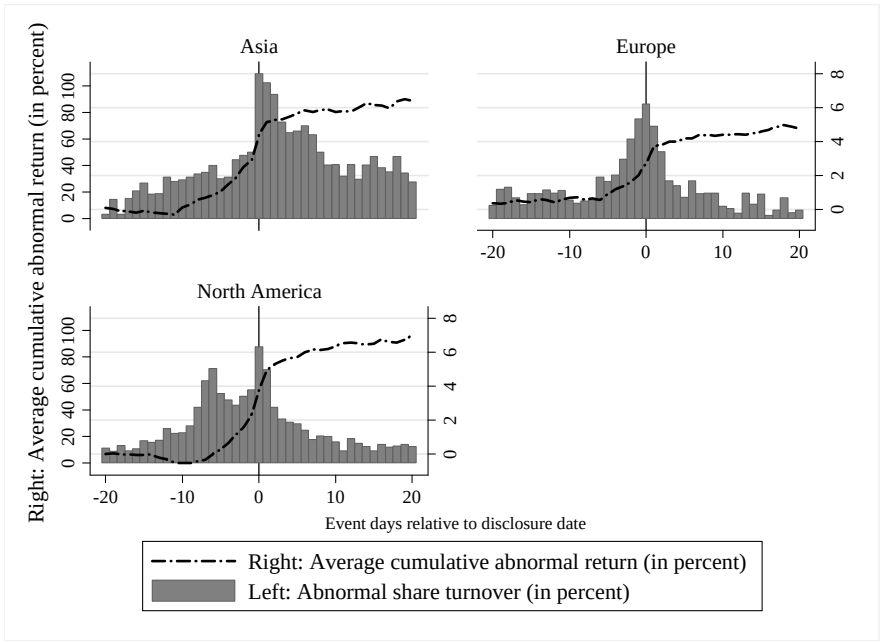


Figure 3
Foreign engagements per fund

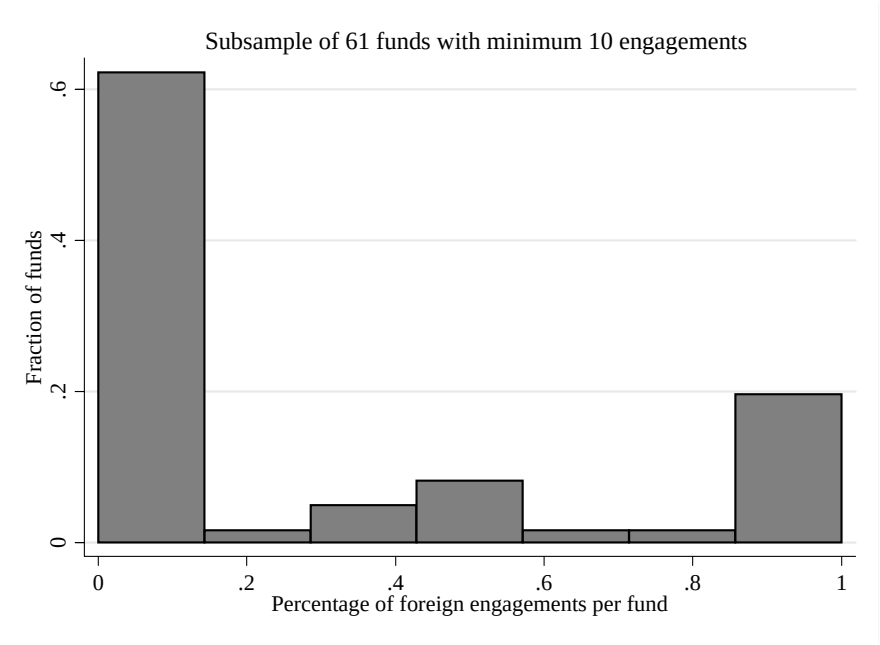


Table 1
Hedge fund activism across countries

This table describes the number of engagements by a hedge fund between 2000 and 2010, the fraction of such engagements that involved a wolf pack (two or more hedge fund activists engaging the same target), the fraction of engagements that involve a foreign activist, the fraction of engagements that involve a U.S.-based foreign activist, the maximum stake held by the activists during the engagement period, and the country-specific regulatory ownership disclosure threshold. For a subsample of engagements with coverage on FactSet (FS) in the engagement year (n = 958 engagements) the table reports market capitalization of the target and institutional investor shareholdings, as well as market capitalization and institutional shareholdings for the population of firms on FS. Reported numbers are averages, except where indicated.

Country	Number of engage-ments	Fraction wolf-packs"	Fraction foreign activists	Fraction U.S. foreign activist	Fraction of shares held by hedge fund activist(s)	Regula-tory disclosure threshold	Subsample of engagements with FS coverage		FS firm population			
							Market cap US$ (median)	Fraction held by inst. inv. (median)	Market cap US$ (median)	Fraction held by inst. inv., 25th pctile	Fraction held by inst. inv., 50th pctile	Fraction held by inst. inv., 75th pctile
Region: Asia												
Hong Kong	7	0.00	1.00	0.14	0.11	0.05	4,290	0.12	252	0.01	0.04	0.12
Israel	1	0.00	1.00	1.00	0.10	0.05	–	–	121	0.01	0.03	0.12
Japan	184	0.10	0.73	0.42	0.13	0.05	360	0.07	241	0.01	0.04	0.09
South Korea	23	0.09	0.22	0.17	0.10	0.05	256	0.04	158	0.00	0.03	0.09
Region: Europe												
Austria	1	0.00	1.00	1.00	0.05	0.05	–	–	330	0.02	0.08	0.16
Belgium	9	0.00	0.44	0.33	0.07	0.05	3,105	0.23	221	0.02	0.06	0.14
Denmark	1	0.00	1.00	0.00	0.05	0.05	1,092	0.28	193	0.03	0.14	0.23
Finland	3	0.00	1.00	0.00	0.08	0.05	147	0.53	197	0.06	0.18	0.29
France	27	0.22	0.78	0.56	0.11	0.05	4,548	0.32	173	0.02	0.07	0.16
Germany	53	0.32	1.00	0.53	0.08	0.03	2,089	0.22	149	0.02	0.08	0.20
Greece	3	0.00	1.00	0.00	0.08	0.05	14,961	0.22	200	0.00	0.01	0.08
Ireland	2	0.00	1.00	0.50	0.05	0.05	2,090	0.48	187	0.09	0.19	0.32
Italy	42	0.19	0.86	0.48	0.05	0.02	2,533	0.13	373	0.02	0.06	0.14
Luxembourg	5	0.00	1.00	0.20	0.03	0.05	26,294	0.12	506	0.01	0.10	0.26
Netherlands	22	0.27	1.00	0.32	0.10	0.05	1134	0.33	615	0.10	0.22	0.39
Norway	7	0.00	1.00	0.29	0.11	0.05	738	0.35	188	0.06	0.14	0.26
Portugal	1	0.00	1.00	0.00	0.01	0.05	8,878	0.10	389	0.02	0.06	0.12
Spain	5	0.00	1.00	0.00	0.05	0.05	165	0.11	929	0.02	0.08	0.16
Sweden	15	0.27	0.60	0.00	0.08	0.05	1,407	0.36	146	0.06	0.17	0.33
Switzerland	19	0.11	0.68	0.26	0.14	0.03	775	0.30	475	0.03	0.13	0.26
U.K.	165	0.12	0.38	0.23	0.13	0.03	278	0.27	97	0.09	0.20	0.32
Region: North America												
Canada	20	0.00	0.75	0.70	0.16	0.10	2,475	0.41	87	0.05	0.13	0.30
U.S.	1,125	0.26	0.01	0.00	0.11	0.05	359	0.77	203	0.11	0.43	0.78
Asia	214	0.09	0.68	0.39	0.12	–	360	0.07	224	0.01	0.04	0.09
Europe	381	0.17	0.66	0.32	0.10	–	1,411	0.24	180	0.04	0.12	0.25
N. America	1,145	0.26	0.02	0.01	0.11	–	370	0.77	181	0.09	0.35	0.74
Total	1,740	0.22	0.24	0.13	0.11	–	423	0.56	201	0.02	0.10	0.32

Table 2
Activist engagements relative to market size and takeovers

The table compares the incidence of activist engagements and unsolicited takeover offers across regions and countries. Unsolicited takeover offers are from SDC Platinum and include all listed targets with market capitalization of at least $10 million. The number of (domestic) listed firms is from the World Bank. Countries are sorted in declining order by "Activist engagements per 1,000 listed firms."

Region/Country	Total number of activist engagements	Activist engagements per 1,000 listed firms	Unsolicited bids per 1,000 listed firms	Activist engagements per year (avg)	Unsolicited bids per year (avg)
Region					
Asia	214	3.2	0.5	19.5	2.8
Europe	381	3.4	2.1	34.6	20.5
North America	1,145	11.7	4.6	104.1	40.1
Countries with at least five activist engagements during sample period					
U.S.	1,125	19.6	5.8	102.3	31.4
Italy	42	13.3	1.6	3.8	0.5
Luxembourg	5	12.4	5.3	0.5	0.2
Netherlands	22	11.6	7.4	2	1.2
Germany	53	7.3	1.1	4.8	0.7
Switzerland	19	6.6	4.9	1.7	1.3
U.K.	165	6	4.1	15	9.9
Japan	184	4.9	0.7	16.7	2.5
Sweden	15	4.8	4	1.4	1.2
Belgium	9	4.6	1.2	0.8	0.3
Norway	7	3.6	4.8	0.6	0.9
France	27	3	1.2	2.5	1
South Korea	23	1.2	0.1	2.1	0.2
Hong Kong	7	0.6	0.2	0.6	0.2
Canada	20	0.6	3.3	1.8	8.7
Spain	5	0.2	0.6	0.5	1.5

Table 3
Activist engagements by year, country and fund group

The table shows descriptive statistics for all 1,740 activist engagements between January 1, 2000 and December 31, 2010. In panel A, wolf pack indicates an engagement of multiple activists with the same target. Panel B tabulates the country of origin of both activists and targets.

A. Wolf pack engagements

	Engagements	Percentage	Target firms	Percentage
Stand-alone activist	1,362	78.3	1,315	88.2
Wolf pack	378	21.7	172	11.8
Total	1,740	100.0	1,534	100.0
If wolf pack				
2 hedge funds involved	290	76.7	142	83.5
3 or more hedge funds involved	88	23.3	28	16.5
Total	378	100.0	170	100.0

B. Domestic and foreign engagements by activist origin

Type	Number of engagements		Percentage
Domestic non-U.S. engagements: Country of origin of the hedge fund			
U.K.	102		
Japan	50		
South Korea	18		
France	6		
Switzerland	6		
Sweden	6		
Italy	6		
All other countries	10		
Total non-U.S. activists	204	Domestic non-U.S. engagements	11.7
U.S. activists at home	1,115	Domestic U.S. engagements	64.1
Foreign non-U.S. engagements: Country of origin of the hedge fund			
U.K.	109		
Singapore	36		
Switzerland	15		
Sweden	8		
Monaco	8		
All other countries	26		
Total non-U.S. activists	202	Foreign non-U.S. engagements	11.6
U.S. activists abroad	219	Foreign U.S. engagements	12.6
Total	1,740		100

Table 4
Probability of activist engagements

The table provides the results of probit regressions in which the dependent variable is whether a firm is engaged by an activist (1) or not (0) in a given year. All nonbinary coefficients are reported as marginal effects. The "All countries" sample includes all firms from the FactSet database from 2000 to 2010 with nonmissing data (45 countries, 25,018 firms, 114,978 firm-years; of these, 90,470 firm-years have nonmissing data also for Illiquidity). The "Only activist markets" sample includes only countries in which we observe at least five engagements during the sample period (13 countries, 13,479 firms, 68,157 firm-years). The main independent variables are institutional ownership by domestic institutions (IO_Domestic), foreign U.S.-based institutions (IO_Foreign U.S.), and foreign non-U.S.-based institutions (IO_Foreign Non-U.S.); firm size (log of market capitalization); Market-to-book (total assets minus book value of equity plus market value of equity over total assets); Profitability (EBITDA over total assets); Leverage (Total debt over total assets); Cash (cash and cash equivalents over total assets); Dividend yield (Common cash dividends over book equity); Payout (Dividend payout per share); Investment (Capex over total assets); U.S. GAAP (whether (1) or not (0) a firm uses U.S. accounting standards); Index member (whether (1) or not (0) a firm belongs to one of 48 major domestic stock market indices); and Illiquidity (number of zero daily returns per year divided by the number of available daily returns per year, minimum of 200 available daily returns per year). All continuous variables are winsorized at the 1st and 99th percentiles. White (1980) heteroscedasticity-robust standard errors are reported in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)	(4)
Sample	All countries	All countries	Only activist markets	Only activist markets
IO_domestic	0.037***	0.040***	0.047***	0.049***
	[0.002]	[0.002]	[0.003]	[0.003]
IO_foreign U.S.	0.063***	0.110***	0.180***	0.209***
	[0.010]	[0.014]	[0.021]	[0.022]
IO_foreign non-U.S.	0.034***	0.036***	0.037*	0.031
	[0.012]	[0.014]	[0.019]	[0.021]
Ln(Market cap)	-0.000	-0.002***	-0.002***	-0.001**
	[0.000]	[0.000]	[0.001]	[0.001]
Market-to-book	-0.006***	-0.007***	-0.008***	-0.008***
	[0.001]	[0.001]	[0.001]	[0.001]
Profitability	0.003	-0.003	-0.002	-0.003
	[0.002]	[0.003]	[0.004]	[0.004]
Leverage	0.010***	0.007***	0.011***	0.010***
	[0.002]	[0.003]	[0.003]	[0.003]
Cash	0.014***	0.008***	0.011***	0.011***
	[0.002]	[0.003]	[0.004]	[0.004]
Div yield	-0.112***	-0.117***	-0.095***	-0.073**
	[0.024]	[0.027]	[0.033]	[0.033]
Payout	0.000***	0.000***	0.000***	0.000**
	[0.000]	[0.000]	[0.000]	[0.000]
Investment	-0.037***	-0.028***	-0.012	-0.008
	[0.007]	[0.009]	[0.012]	[0.012]
U.S. GAAP	0.018***	0.014***	0.011***	0.007**
	[0.001]	[0.002]	[0.002]	[0.003]
Index member	0.005***	0.005***	0.002	-0.002
	[0.001]	[0.001]	[0.002]	[0.002]
Illiquidity		-0.038***	-0.031***	-0.013
		[0.006]	[0.007]	[0.008]
Year FE	Yes	Yes	Yes	Yes
Country FE	No	No	No	Yes
Observations	114,987	90,470	68,157	68,157
Pseudo R-squared	0.112	0.106	0.0842	0.0891

Table 5
Abnormal returns from activist engagement announcements

The table shows average cumulative abnormal returns (CARs) around the initial filing date or the first press disclosure date of engagements, market model-adjusted. In panels C and D wolf pack engagements involving multiple funds are treated as one engagement only; in case within a wolf pack engagement are disclosed on separate dates, CARs are summed per wolf pack, across announcements. *Stake held by activist (Start)* indicates the activist stake at initial disclosure (summed over all members of the wolf pack if applicable); *Stake held by activist (High)* indicates the highest stake the activist reaches during the engagement (summed over all members of the wolf pack if applicable); and both variables are available for a subsample of engagements. In panel D, *Wolf pack* (1/0) is a dummy variable indicating a wolf pack (1) or stand-alone (0) engagement; and *Residual wolf pack (start)* is the residual from a regression of the *Wolf pack* (1/0) dummy on *Stake held by activist (Start)*, with announcement year and country fixed effects. *Residual wolf pack (High)* is the residual from the same regression, but instead uses *Stake held by activist (High).* The event window is centered on day zero, where day zero corresponds to the filing or press disclosure date. For the market model, factor loadings are estimated over 250 trading days preceding the event window, using country-specific domestic market returns, with a minimum of 150 daily observations (1,617 out of 1,740 engagement disclosures have sufficient data). Abnormal returns are winsorized at the 1st and 99th percentiles. Standard errors (White 1980 heteroscedasticity robust in panel E) are reported in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Sample	Event window: (-10,10)			Event window: (-20,20)		
	Abn. ret.	SE	*N*	Abn. ret.	SE	*N*
A. Abnormal returns around engagement disclosure						
Full	6.14***	[0.36]	1,617	6.40***	[0.486]	1,617
Asia	6.06***	[0.912]	213	6.43***	[1.238]	213
Europe	3.93***	[0.632]	377	4.75***	[0.898]	377
North America	6.97***	[0.480]	1,027	7.00***	[0.641]	1,027

B. Time series of abnormal returns around engagement disclosure

	Full sample		Asia		Europe		North America	
Disclosure year	CAR (-10,10)	CAR (-20,20)	CAR (-10,10)	CAR (-20,20)	CAR (-10,10)	CAR (-20,20)	CAR (-10,10)	CAR (-20,20)
2000	12.8	13.5	7.0	7.2	6.3	5.6	16.9	18.8
2001	5.3	9.4	-2.1	4.7	0.1	-5.8	6.8	13.0
2002	6.8	8.1	8.6	12.4	4.5	2.5	8.3	11.8
2003	7.8	8.8	18.1	17.9	6.4	9.6	7.5	8.0
2004	7.3	7.5	10.7	15.6	3.4	5.2	8.6	6.1
2005	4.3	4.3	2.4	1.8	2.5	5.0	5.8	5.0
2006	6.0	6.2	6.2	6.6	3.3	3.4	6.9	7.0
2007	4.8	4.4	4.2	3.7	3.5	3.5	5.5	4.9
2008	7.8	7.5	14.0	12.1	4.0	5.7	7.8	7.2
2009	5.5	7.3	-8.8	1.3	12.1	17.8	4.5	4.9
2010	6.7	6.4			1.1	1.2	8.4	7.9

C. Abnormal returns around stand-alone and wolf pack engagement disclosures

Sample	Event window: (-10,10)			Event window: (-20,20)		
	Abn. ret.	SE	*N*	Abn. ret.	SE	*N*
Stand-alone activist	5.99***	[0.45]	1,264	6.32***	[0.63]	1,264
Wolf pack activist	14.05***	[1.87]	164	13.82***	[2.33]	164
Difference	-8.06***	[1.41]		-7.50***	[1.93]	

D. Regression of abnormal return around engagement disclosure on activist stakes and wolf pack status								
Dependent variable:	CAR (-10,10)				CAR (-20,20)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Stake held by activist (start)	0.18**	0.27***			0.19*	0.28***		
	[0.073]	[0.071]			[0.10]	[0.097]		
Stake held by activist (high)			0.12**	0.15***			0.031	0.064
			[0.053]	[0.053]			[0.074]	[0.073]
Wolf pack (1/0)	6.99***		7.32***		6.39***		6.85***	
	[1.49]		[1.47]		[2.04]		[2.04]	
Residual wolf pack (start)		7.26***				7.04***		
		[1.52]				[2.09]		
Residual wolf pack (high)				7.05***				6.96***
				[1.52]				[2.10]
Observations	1,216	1,216	1,048	1,048	1,216	1,216	1,048	1,048
Adjusted R-squared	0.028	0.028	0.029	0.026	0.013	0.014	0.010	0.009

E. Abnormal returns around domestic and foreign engagement disclosures					
	Domestic non-U.S.	Domestic U.S.	Foreign non-U.S.	Foreign U.S.	Diff. (*t*-stat) (1)&(2) - (3)&(4)
	(1)	(2)	(3)	(4)	
Event window: (-10,10)	7.02***	6.97***	3.84***	3.55***	4.01***
	[1.02]	[0.49]	[0.86]	[0.74]	
Event window: (-20,20)	7.34***	6.94***	4.27***	4.87***	2.21**
	[1.44]	[0.65]	[1.12]	[1.10]	

Table 6
Activist engagement outcomes

The table provides the number of engagements and subsequent successful outcomes by year of the outcome announcement. Engagement outcomes are categorized as board changes (replacement of the CEO, Chairman, or Nonexecutive Directors), changes to pay-out policy (share buybacks or increased/special dividends), restructuring (divestitures and spin-offs of noncore assets, and blocking diversifying acquisitions), and takeovers (the target firm is acquired by a strategic buyer or private equity fund). Results are separately reported for Asia, Europe (EU), and North America (NA). The stock of ongoing engagements is number of outstanding engagements from the previous year plus entries minus exits.

Outcome	Ongoing engagements (Stock)				All successful outcomes				Outcomes by type			
year	*Asia*	*EU*	*NA*	*Total*	*Asia*	*EU*	*NA*	*Total*	*Board*	*Payout*	*Restr.*	*Takeo.*
2000	1	15	32	48	2	2	9	13	2	2	4	5
2001	3	24	76	103	1	6	19	26	8	5	9	4
2002	6	41	102	149	1	14	24	39	10	12	7	10
2003	9	57	146	212	2	26	31	59	24	9	14	12
2004	32	84	183	299	7	33	44	84	31	15	23	15
2005	78	121	278	477	8	49	69	126	58	17	29	22
2006	119	172	476	767	11	58	169	238	86	48	44	60
2007	138	219	585	942	17	75	180	272	83	70	44	75
2008	153	212	555	920	9	33	148	190	75	47	36	32
2009	122	180	449	751	5	18	101	124	64	25	17	18
2010	89	156	355	600	0	13	47	60	27	2	14	17

	Board outcomes/stock			Payout outcomes/stock			Restruct. outcomes/stock			Takeover outcomes/stock		
	Asia	*EU*	*NA*	*Asia*	*EU*	*NA*	*Asia*	*EU*	*NA*	*Asia*	*EU*	*NA*
2000	0.00	0.07	0.03	1.00	0.00	0.03	0.00	0.00	0.13	1.00	0.07	0.09
2001	0.33	0.00	0.09	0.00	0.04	0.05	0.00	0.21	0.05	0.00	0.00	0.05
2002	0.00	0.10	0.06	0.17	0.10	0.07	0.00	0.10	0.03	0.00	0.05	0.08
2003	0.00	0.19	0.09	0.00	0.07	0.03	0.22	0.12	0.03	0.00	0.07	0.05
2004	0.06	0.14	0.09	0.13	0.02	0.05	0.03	0.14	0.05	0.00	0.08	0.04
2005	0.01	0.19	0.12	0.05	0.01	0.04	0.01	0.14	0.04	0.03	0.07	0.04
2006	0.04	0.07	0.14	0.01	0.07	0.07	0.03	0.08	0.06	0.02	0.12	0.08
2007	0.03	0.10	0.10	0.04	0.06	0.09	0.04	0.08	0.04	0.01	0.10	0.09
2008	0.01	0.08	0.10	0.04	0.01	0.07	0.01	0.03	0.05	0.00	0.03	0.05
2009	0.02	0.06	0.12	0.01	0.01	0.05	0.02	0.01	0.03	0.00	0.03	0.03
2010	0.00	0.02	0.07	0.00	0.01	0.00	0.00	0.03	0.03	0.00	0.03	0.04

Table 7
Abnormal returns from engagement outcomes

The table shows average cumulative abnormal returns (CARs) around the announcement of engagement outcomes (market model adjusted) in panels A and B, engagement outcome sequencing in panel C, and compares multiple activist and stand-alone engagements in panel D and domestic and foreign engagements in panel E. Engagement outcomes are categorized as board changes, changes to pay-out policy, restructuring, and takeovers. In case of multiple announcements of outcomes in an engagement, CARs are summed across announcements. In case of multiple outcome types within an engagement. the engagement is classified as "Multiple+Takeover" (if outcomes include a takeover) or "Multiple+NoTakeover." The event window is centered on the earliest announcement date of the outcome. Factor loadings are estimated over 250 trading days preceding the event window, using country-specific domestic market returns, with a minimum of 150 daily observations. In panels A and B, 850 out of 1,740 engagements have sufficient data and at least one subsequent outcome. In panel C, data are reported for 150 outcomes of the 58 engagements that have multiple outcomes and involve a takeover (Multiple+Takeover). In panel D, wolf pack engagements involving multiple funds are treated as one engagement only if individual engagements within a wolf pack are disclosed on separate dates, CARs are summed per wolf pack, across announcements. Abnormal returns are winsorized at the 1st and 99th percentiles. Standard errors are reported in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

A. Abnormal returns around engagement outcomes

	Event window: (-10,10)			Event window: (-20,20)		
	Abn. ret.	SE	*N*	Abn. Ret.	SE	*N*
All outcomes	6.33***	[0.62]	850	6.42***	[0.78]	850
Board	4.04***	[1.00]	272	4.48***	[1.45]	272
Payout	1.42	[1.07]	134	-0.16	[1.54]	134
Restructuring	5.74***	[1.69]	118	5.60***	[1.92]	118
Takeover	9.33***	[1.16]	187	9.73***	[1.33]	187
Multiple+Takeover	18.3***	[3.68]	58	18.1***	[4.20]	58
Multiple+NoTakeover	7.46***	[2.44]	81	9.04***	[2.95]	81

B. Abnormal returns around engagement outcomes by region

		Event window: (-10,10)			Event window: (-20,20)		
Region	Outcome	Abn. Ret.	SE	*N*	Abn. Ret.	SE	*N*
Asia	All outcomes	4.03**	[1.91]	38	2.72	[3.48]	38
	Board	-1.03	[5.56]	6	-4.20	[10.6]	6
	Payout	2.34	[2.22]	15	-1.62	[3.98]	15
	Restructuring	8.03*	[3.65]	9	4.60	[4.07]	9
	Takeover	3.33	[8.16]	4	1.15	[13.7]	4
	Multiple+Takeover	13.7***	[0.10]	2	1.70	[9.42]	2
	Multiple+NoTakeover	5.60	[21.0]	2	51.7	[25.1]	2
Europe	All outcomes	8.32***	[1.43]	183	8.77***	[1.74]	183
	Board	1.75	[2.90]	43	4.03	[4.19]	43
	Payout	-0.21	[1.56]	12	1.30	[3.06]	12
	Restructuring	5.53***	[1.81]	33	5.25**	[2.09]	33
	Takeover	9.87***	[1.88]	54	10.8***	[2.25]	54
	Multiple+Takeover	27.3***	[7.51]	16	25.1**	[9.45]	16
	Multiple+NoTakeover	11.9**	[5.27]	25	10.3*	[5.93]	25
North America	All outcomes	5.89***	[0.72]	629	5.97***	[0.90]	629
	Board	4.62***	[1.07]	223	4.80***	[1.56]	223
	Payout	1.47	[1.30]	107	-0.11	[1.83]	107
	Restructuring	5.56**	[2.48]	76	5.87**	[2.81]	76
	Takeover	9.29***	[1.48]	129	9.54***	[1.64]	129
	Multiple+Takeover	15.0***	[4.34]	40	16.2***	[4.76]	40
	Multiple+NoTakeover	5.49**	[2.66]	54	6.89**	[3.25]	54

C. Sequence of engagement outcomes for engagements with multiple outcomes that involve a takeover

	Average engagement length with multiple outcome	Average waiting time to event			
		Board (1)	Payout (2)	Restructuring (3)	Takeover (4)
Time	806 days				
Percentage	100	36	48	44	76
t-test vs. takeover (4)		-8.25***	-4.32***	-4.71***	

D. Abnormal returns around successful outcomes of stand-alone and wolf pack engagements

	Stand-alone	Wolf pack	Diff		Stand-alone	Wolf pack	Diff
P(Any outcome)	46%	78%	-8.11***	P(Restructuring)	6%	11%	-2.73***
P(Board)	12%	32%	-7.32***	P(Takeover)	11%	15%	-1.59
P(Payout)	7%	9%	-1.01	P(Multiple)	11%	11%	-0.16

	Event window: (-10,10)					Event window: (-20,20)				
	Stand-alone		Wolf pack		Diff	Stand-alone		Wolf pack		Diff
	Abn. ret.	SE	ARet.	SE		ARet.	SE	ARet.	SE	
All outcomes	6.38***	[0.76]	7.22***	[1.59]	-0.46	7.11***	[0.99]	5.89***	[1.81]	0.53
Board	2.49*	[1.41]	4.74**	[2.21]	-0.84	4.20*	[2.16]	4.5	[3.04]	-0.07
Payout	1.66	[1.33]	-1.03	[2.39]	0.77	-0.27	[1.95]	-3.82	[3.11]	0.69
Restructuring	5.19***	[1.85]	5.8	[5.25]	-0.14	6.25**	[2.57]	4.07	[4.09]	0.4
Takeover	8.75***	[1.33]	14.0***	[3.44]	-1.51	9.97***	[1.58]	11.6***	[3.36]	-0.4
Multiple	12.0***	[2.13]	13.9**	[5.13]	-0.3	12.8***	[2.48]	12.6*	[6.31]	0.03

E. Abnormal returns around successful outcomes of domestic and foreign engagements

	Domestic non-U.S. (1)	Domestic U.S. (2)	Foreign non-U.S. (3)	Foreign U.S. (4)	Diff. (*t*-stat) (1)&(2) - (3)&(4)
P(Any outcome)	37%	57%	39%	41%	5.18***
P(Board)	18%	27%	17%	12%	4.84***
P(Payout)	8%	13%	8%	10%	2.08**
P(Restructuring)	10%	11%	10%	16%	-1.39
P(Takeover)	15%	16%	13%	12%	1.54

		ARet.	SE	ARet.	SE	ARet.	SE	ARet.	SE	
(-10,10)	All outcomes	9.17***	[2.63]	6.19***	[0.73]	6.19***	[1.89]	5.11***	[1.69]	0.56
	Board	-3.06	[4.37]	4.90***	[1.08]	4.71	[4.86]	0.11	[2.30]	0.50
	Payout	2.26	[2.90]	1.72	[1.33]	-1.33	[2.27]	0.76	[2.15]	0.63
	Restructuring	4.03	[3.88]	5.94**	[2.54]	7.43**	[2.70]	5.09**	[2.30]	-0.05
	Takeover	10.8**	[4.15]	9.33***	[1.49]	6.30**	[2.20]	10.7***	[2.62]	0.30
	Multiple	24.0***	[6.21]	10.2***	[2.46]	11.1*	[5.69]	7.06	[9.47]	0.62
(-20,20)	All outcomes	8.91***	[3.25]	6.32***	[0.91]	7.39***	[2.76]	4.35**	[1.96]	0.34
	Board	-3.74	[6.57]	5.18***	[1.56]	7.25	[7.23]	1.55	[3.86]	0.53
	Payout	0.65	[9.07]	0.35	[1.86]	-5.17	[3.89]	-0.61	[2.95]	0.66
	Restructuring	2.47	[3.59]	6.43**	[2.86]	4.87	[3.93]	5.03*	[2.51]	0.26
	Takeover	12.0**	[4.50]	9.61***	[1.66]	9.13**	[3.88]	8.77**	[3.23]	0.62
	Multiple	23.5***	[7.51]	11.2***	[2.80]	14.6*	[7.58]	5.02	[10.5]	0.47

Table 8
Abnormal returns from activist engagements, announcement to exit

The table reports calendar-time portfolio returns of all firms targeted by activists, using monthly return data (n=132). In panel A, portfolios are formed and rebalanced each month to include all firms that have been engaged by an activist within the event window. The event window for each engagement begins in t=0, the month of the initial filing date or the first press disclosure date and ends in the month during which the activist ended the engagement or, if no exit date is known, December 2010. In panel B, three portfolios are constructed similarly with the event window decomposed into "only months t=0", "only months with outcome announcements", and "all other months." Alpha is the intercept on a regression of monthly portfolio excess returns. The explanatory variables are the excess return of the market (MktModel) and the four Fama and French (1993) and Carhart (1997) mimicking portfolios (Carhart), based on U.S. return data. Alphas are in annual percentages. L/S is annual average return of a zero cost portfolio that holds the portfolio of engagements with outcomes and sells short the portfolio of engagements with no outcomes. Returns are winsorized at the 1st and 99th percentiles. Standard errors are in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

A. Abnormal return, announcement to exit

Equal-weighted	With outcomes		With no outcomes		L/S (outcomes-no outcomes)		All engagements	
	MktModel alpha (1)	Carhart alpha (2)	MktModel alpha (3)	Carhart alpha (4)	MktModel alpha (5)	Carhart alpha (6)	MktModel alpha (7)	Carhart alpha (8)
Full sample	8.399**	1.104	-5.513	-9.750***	13.912***	10.854***	1.984	-3.547
	[4.119]	[3.407]	[3.804]	[3.608]	[4.014]	[4.078]	[3.254]	[2.737]
Asia	13.379**	11.568**	1.204	-0.809	12.175**	12.377**	3.327	3.286
	[5.141]	[5.189]	[5.458]	[5.469]	[5.267]	[5.418]	[3.745]	[3.901]
Europe	5.643	1.413	-8.853	-12.697**	14.496***	14.110**	-2.190	-5.904
	[4.302]	[4.199]	[5.500]	[5.390]	[5.330]	[5.544]	[4.153]	[4.022]
N. America	8.104*	-0.801	-5.271	-11.784***	13.374***	10.983**	1.753	-5.296*
	[4.559]	[3.585]	[4.763]	[4.423]	[4.475]	[4.606]	[3.520]	[2.805]
Value-weighted	With outcomes		With no outcomes		L/S (outcomes-no outcomes)		All engagements	
Full sample	11.254***	7.987**	3.999	2.325	7.255	5.662	7.598**	4.966
	[3.473]	[3.340]	[5.251]	[5.379]	[5.982]	[6.140]	[3.134]	[3.064]
Asia	14.183**	13.216**	2.587	0.588	11.596	12.628	4.482	4.509
	[6.172]	[6.299]	[6.717]	[6.820]	[8.194]	[8.350]	[4.047]	[4.211]
Europe	8.238*	8.077*	4.587	3.209	3.650	4.868	6.397	5.757
	[4.889]	[4.781]	[6.506]	[6.702]	[7.222]	[7.417]	[4.583]	[4.611]
N. America	11.309**	6.550	1.380	-1.206	9.930	7.756	8.065**	3.723
	[4.613]	[4.449]	[6.633]	[6.816]	[8.513]	[8.675]	[3.964]	[3.796]

B. Abnormal return, decomposition of event window				
	With outcomes		With no outcomes	
	MktModel alpha	Carhart alpha	MktModel alpha	Carhart alpha
Portfolio: Only months t=0				
Equal-weighted	18.859***	18.552***	14.213***	16.841***
	[3.671]	[3.840]	[3.779]	[3.854]
Value-weighted	18.781***	18.449***	14.505***	16.976***
	[5.256]	[5.507]	[4.465]	[4.595]
Portfolio: Only months with outcome announcements				
Equal-weighted	27.545***	26.793***	-	-
	[4.451]	[4.619]	-	-
Value-weighted	26.409***	28.225***	-	-
	[5.669]	[5.870]	-	-
Portfolio: All other months				
Equal-weighted	-1.302	-6.670**	-7.250*	-11.677***
	[3.090]	[2.573]	[3.674]	[3.436]
Value-weighted	5.842**	3.374	6.306	3.987
	[2.917]	[2.768]	[4.970]	[5.061]

Table 9
Engagement probabilities and returns across countries

Dependent variables are as indicated in column titles. Columns 1 to 3: Engagement disclosure CARs are calculated as in Table 5. Columns 4 to 6: Outcome disclosure CARs are calculated as in Table 7; engagements without outcomes are assigned a zero return. Columns 7 to 9: Sample and variables are as in Table 4. Columns 10 to 12: The sample from Columns 7 to 9 is collapsed into country-year observations. The fraction of firms engaged in country *x* in year *t* is calculated as the number of firms that are currently engaged by an activist divided by the total number of firms, per country and year. *Market cap/GDP* (market capitalization of listed domestic firms over GDP), *Rule of law* (the perception of the extent to which agents have confidence in and abide by the rules of society) are from the Worldbank as of 2000; *Disclosure threshold* is the minimum regulatory disclosure threshold for blockholders; *Common Law* equals one for countries with common law, zero otherwise; the *Revised antidirector* index is from Djankov et al. (2008); *Quality of governance* (the percentage of governance attributes for which an average firm meets or exceeds the minimum satisfactory standard on 44 governance attributes), *Board independence* (whether or not an average firm's board is controlled by more than 50% independent outside directors), and *Board structure* (whether or not an average firm's board is annually elected/not staggered) are from Aggarwal et al. (2009). Institutional ownership variables include domestic and foreign institutional ownership, firm-level control variables include Market-to-book, Leverage, Cash, Dividend yield, Payout, Investment, U.S. accounting standards, Index membership, and Illiquidity, all as defined in Table 4. Firm-level explanatory variables are as of the year during which the engagement is announced. All nonbinary variables are winsorized at the 1st and 99th percentiles. White (1980) heteroscedasticity-robust standard errors are reported in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Dependent variable	Engagement disclosure CAR (-20,20)			Outcome disclosure CAR (-20,20)			Firm engaged in year t (1) or not (0)			Fraction of firms engaged in country *x* in year *t*		
IO_Domestic	2.165	0.554	-0.217	1.374	0.813	-0.164	0.043***	0.052***	0.054***	5.952***	8.728***	8.070***
	[2.714]	[3.892]	[3.908]	[2.531]	[3.330]	[3.377]	[0.002]	[0.003]	[0.003]	[1.804]	[1.594]	[2.384]
IO_Foreign_U.S.	-0.648	-3.410	1.698	30.004	45.681*	48.629*	0.114***	0.091***	0.184***	-7.169	1.822	2.353
	[21.954]	[23.137]	[22.396]	[25.518]	[23.647]	[25.441]	[0.014]	[0.014]	[0.019]	[5.600]	[5.733]	[7.330]
IO_Foreign Non-U.S.	10.174	11.557	14.014	24.599	29.628	26.282*	0.056***	0.058***	0.094***	13.170***	16.902***	15.123***
	[20.633]	[21.568]	[21.775]	[16.250]	[18.410]	[15.864]	[0.013]	[0.014]	[0.017]	[4.673]	[4.547]	[5.222]
Market cap/GDP	0.039*			0.001			-0.000***			-0.001		
	[0.024]			[0.020]			[0.000]			[0.001]		
Rule of law	-4.097			7.186**			0.022***			1.200***		
	[3.160]			[2.851]			[0.001]			[0.161]		
Disclosure threshold		1.797*			-0.684			-0.007***			-0.279***	
		[0.972]			[0.878]			[0.001]			[0.060]	
Common law		0.257			4.242*			-0.020***			-0.988***	
		[2.834]			[2.433]			[0.002]			[0.340]	
Antidirector rights		-0.517			0.524			0.004***			-0.206*	
		[1.253]			[1.064]			[0.001]			[0.108]	
Quality of governance			16.228			3.783			-0.031			-5.488***
			[29.748]			[38.336]			[0.025]			[1.953]
Board independence			-3.074			3.893			-0.008*			1.146***
			[6.161]			[7.359]			[0.005]			[0.397]
Board structure			10.649**			2.054			0.018***			-0.685**
			[4.452]			[4.313]			[0.004]			[0.324]
Year FE	Entry	Entry	Entry	Entry	Entry	Entry	Calendar	Calendar	Calendar	Calendar	Calendar	Calendar
Firm-level controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	730	721	719	927	916	914	90,470	89,515	74,832	440	402	230
Adj. R-sq./Pseudo R-sq.	-0.012	-0.012	-0.010	0.031	0.029	0.028	0.089	0.089	0.067	–	–	–
Estimation	OLS	OLS	OLS	OLS	OLS	OLS	Probit	Probit	Probit	GLM	GLM	GLM

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