

Internet Appendix for

Institutional Trading and Hedge Fund Activism

This Internet Appendix provides supplemental information and analyses to the main tables and figures. The first section describes:

- (1) The construction of *firm-day* expected institutional trading volumes used as excluded instruments in the hedge fund *purchasing* regressions in Tables 6 and IA.VII.
- (2) The construction of *firm-year* and *firm-quarter* expected institutional trading volumes used as excluded instruments in the hedge fund *targeting* regressions in Table IA.II and the proportional hazard analyses of activist toehold acquisition and targeting in Table IA.III.
- (3) The nature of institutional and hedge fund trading preceding activism events.

The second section presents supplemental figures and tables:

Figure IA.1: Ownership of Hedge Funds and Other Institutions around the Announcement of Activism (Quarterly 13F Reports)

Figure IA.2: Cumulative Abnormal Returns and Hedge Fund Trade Prices

Figure IA.3: Net Trading Volume of Hedge Funds and Other Institutions by Quartiles of Total Hedge Fund Purchases

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Table IA.I: Characteristics of Target and Non-Target Firms (Full Version of Table 1)

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Table IA.V: Trading in *Non-Target* Stocks by Top Institutional Sellers and Buyers

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Construction of *Firm-Day Expected Institutional Trading Volumes*

We use firm-day expected institutional trades to identify the liquidity effects of institutional selling and buying volumes on hedge fund purchases. While the analysis only applies to target firms, we estimate the institutions' trading behavior from *all* CRSP-Compustat firms that the institutions trade. This is to avoid any potential bias or violation of the exclusion restriction that may result from the *ex-post* assignment of firms into targets and non-targets. For example, in response to negative funding changes, institutions may sell disproportionately more shares in a target than in other stocks because the activist's purchases drive up prices and improve the liquidity of target shares, making selling the target stock relatively more attractive than selling other stocks.

We begin with the universe of all institution-firm-days during our sample period from 2000 to 2007. This universe contains tens of billions of observations, rendering any statistical estimation practically infeasible. To economize on computational resources, we limit the sample to include (i) all institutions that trade target stocks at least twice during the 60-day period before a campaign file date (to represent the institutions that hold these firms' stocks during the period of activist block formation) and (ii) all firms that are traded at least once by these institutions during that period (to represent all firms held by the relevant institutions).

Our calculation of firm-day expected institutional buy and sell volumes is as follows. First, we estimate the parameters of linear models that relate the probabilities that *each individual* institution will buy or sell a *generic* firm's stock to its trading in other stocks *outside the generic firm's SIC-2 industry*. Figure IA.4 presents the univariate relationships. Table IA.VI presents the multivariate model specifications and the average parameter estimates. In Columns (1) and (2), we proxy for the institution's trading in other stocks using the fraction of sell principal [= dollar volume of other stocks sold/(dollar volume of other stocks sold + dollar volume of other stocks purchased)]. In Columns (3) and (4), we use the fraction of stocks sold [= number of other stocks sold/(number of other stocks sold + number of other stocks purchased)]. Since our sample contains over three million institution-firm-day observations, for computational efficiency, we perform the estimation separately for each calendar quarter. The results are similar across the two proxies; therefore, below we only plot the estimated coefficients of the variable *Dummy (trade other stocks) x Fraction of other stocks sold* from the models in Columns (3) and (4). The estimates are significant and positive for selling probability and significant and negative for buying probability in all quarters, and seem to become larger in magnitude towards the end of the sample period.

Second, we proceed to calculate the expected selling (or similarly buying) volume of institution *i* in target stock *j* on day *t* as

$$E_i[\text{sell volume}_{j,t}] = Pr_i[\text{sell}_{j,t}] \times E_i[\text{sell volume}_{j/\text{sell}_j}]$$

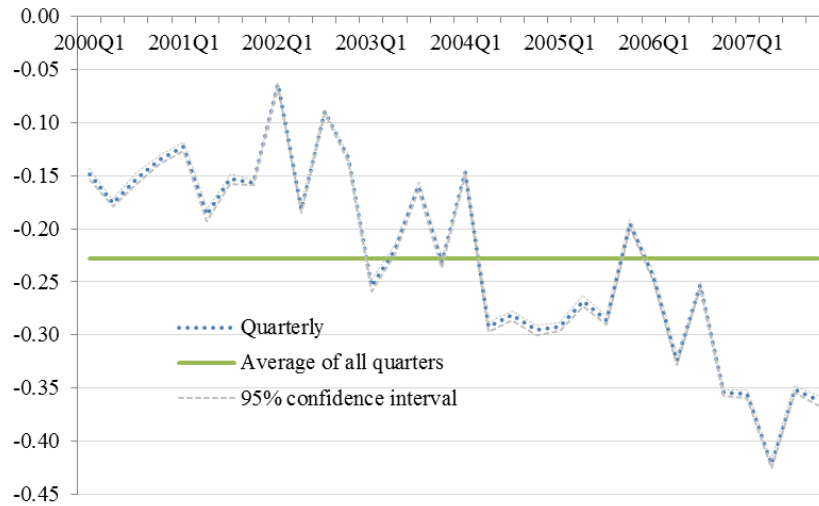
where the sell probability, $Pr_i[\text{sell}_{j,t}]$, is calculated using the parameter estimates obtained in the first step from the sample of all institutions and firms, and the conditional expected trade size of institution *i* in stock *j*, $E_i[\text{sell volume}_{j/\text{sell}_j}]$, is the average volume of institution *i* in stock *j* conditional on buying or selling it during the period *t-240* to *t-60* (or, the period before hedge funds actively accumulate target shares to launch a campaign).

Finally, we aggregate the expected sell (or similarly buy) volumes across all institutions $i \leq N$,

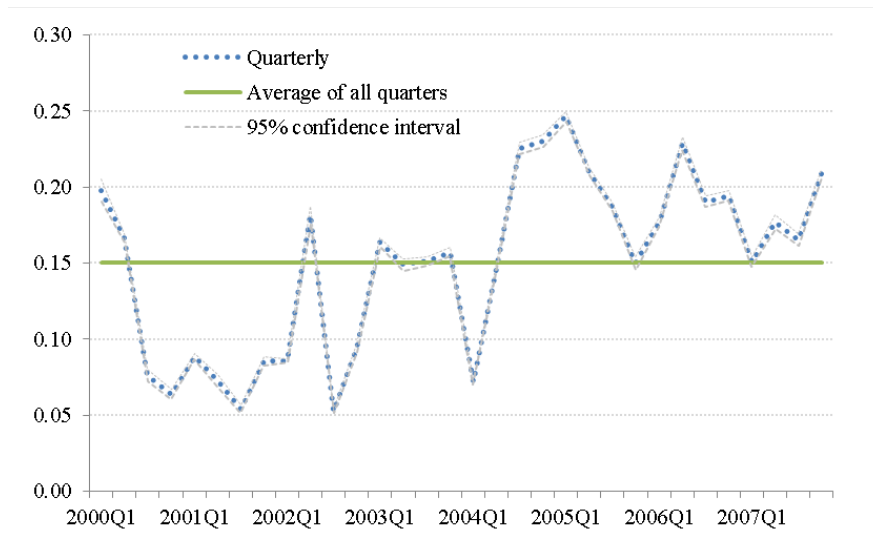
$$E[\text{sell volume}_{j,t}] = \sum_{i=1}^N E_i[\text{sell volume}_{j,t}],$$

to obtain the expected *total* selling volume in stock j on day t , $E[\text{sell volume}_{j,t}]$. We calculate the expected *total* buying volume in a stock in the same manner.

Coefficients of *Dummy[trade other stocks] x Fraction of other stocks sold* in Buying Probability Model



Coefficients of *Dummy[trade other stocks] x Fraction of other stocks sold* in Selling Probability Model

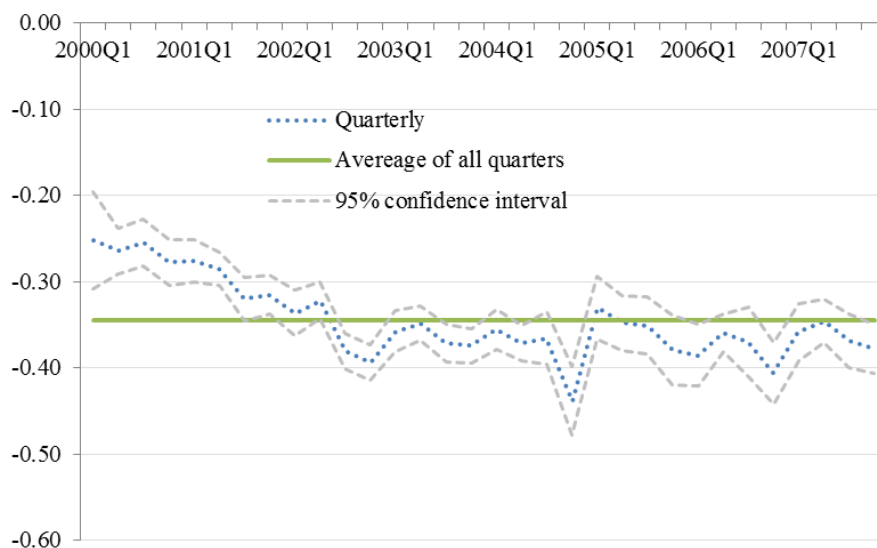


Construction of *Firm-Year* and *Firm-Quarter* Expected Institutional Trading Volumes

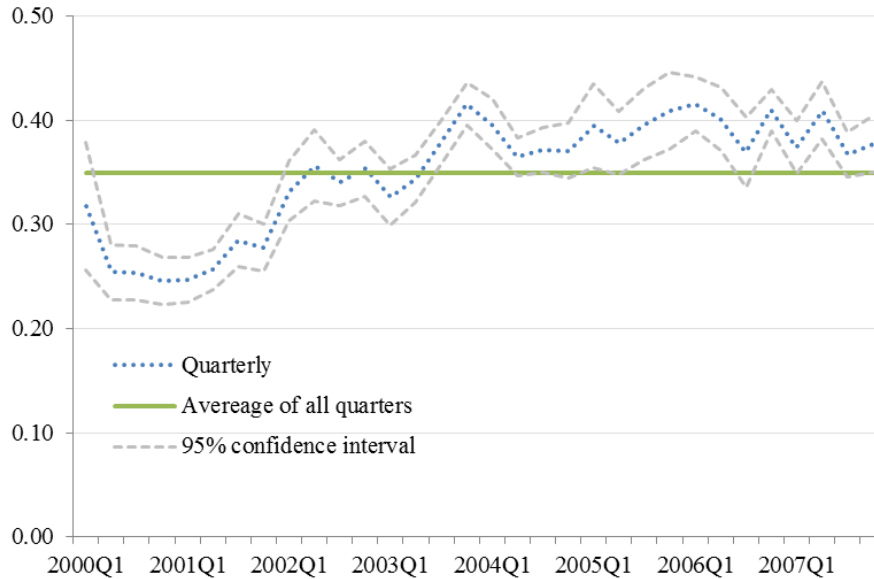
We use firm-year expected institutional trades to identify the liquidity effects of institutional selling and buying volumes on the probability of becoming an activist target. These expected trades provide a robustness check in Table IA.II to the IV results based on mutual fund flows in Table 2 of the paper. The sample includes all CRSP-Compustat firm-years, about 2.5% of which experience activism events while the rest do not. Therefore, unlike the analysis of hedge fund purchases of target shares, which naturally only applies to target firms, here we need expected trades for all firm-years, i.e., for targets and non-targets. Since the expected trades are constructed at the institution level, the observational unit in our estimation is institution-firm-time period (day or week). If we follow the same construction as in the analysis of hedge fund purchases, then we will need to estimate model parameters using several billion institution-firm-day observations over the eight-year sample period. To economize on computational resources, we resort to the weekly frequency, and again perform the estimation separately for each calendar quarter. Otherwise, the construction of firm-year expected institutional trades follows the same process as that of firm-day expected institutional trades.

We begin by estimating the propensity that *each* institution will sell or buy a *generic* firm's stock in *each* week as a function of its trading in other stocks *outside the generic firm's SIC-2 industry*. We use the same specifications as in Table IA.VI. We plot below the quarterly estimated coefficients of the variable *Dummy [trade other stocks] x Fraction of other stocks sold* from the models in Columns (3) and (4). Consistent with the estimates at the daily frequency, the estimates here are all significant and positive for selling probability, and significant and negative for buying probability.

Coefficients of *Dummy[trade other stocks] x Fraction of other stocks sold* in Buying Probability Model



Coefficients of *Dummy[trade other stocks] x Fraction of other stocks sold* in Selling Probability Model



We then use the average quarterly estimates to calculate the predicted propensities that each institution will sell and buy each firm’s stock in each week, and multiply these predicted propensities by the institution’s average trade size per week to obtain the institution’s expected buy and sell volumes for that firm-week. We then sum these institution-level expected buy and sell volumes across all institutions in each week to obtain the expected buy and sell volumes for each firm-week. Finally, we take the 90th percentile of the expected weekly volumes within a quarter and the maximum of these 90th percentiles across all quarters within a year to get to the expected buy and sell volumes for each firm-year. Note that the magnitudes of these expected volumes are still based on the weekly trades. The reason for taking the high end of the distribution is that hedge funds often accumulate the majority of their activist stakes in just a few weeks, and therefore what is relevant for our analysis should be not the average or median institutional trading over the entire year but rather the most intense trading that may concentrate in just a few weeks.

Nature of Institutional and Hedge Fund Trading Preceding Activism Events

We offer additional evidence and discussion to broadly characterize the institutions' trading behavior in target and non-target stocks and support the argument that our instruments are plausibly exogenous to a model of hedge fund purchases. We start with Table IA.VIII, which shows that Ancerno institutions trade target stocks around the activism events in virtually the same manner as they do other stocks. Thus, the institutions' trading process does not appear to vary with intraday market conditions that may be induced by the hedge funds' purchases of target shares.

Next, we investigate transaction costs to study the dynamics of liquidity demand and supply by institutions and hedge funds.¹ The microstructure literature often relies on order type classification to differentiate liquidity demand from supply; limit orders are generally associated with supplying liquidity whereas market orders are perceived as demanding liquidity. However, Ancerno does not provide such classification. Therefore, we adopt the approach in Puckett and Yan (2011) and Franzoni and Plazzi (2013) who estimate an institution's liquidity provision by the price impact of its trades. This approach is also used by Ancerno and by practitioners to evaluate execution quality. Specifically, we estimate a buy (sell) order's price impact as its execution price minus the stock's daily volume-weighted average price, VWAP (the stock's daily VWAP minus the order's execution price), expressed as a percentage of VWAP. Trades that demand liquidity are expected to have positive price impact or transaction costs.

Table IA.IX reports summary statistics of transaction costs for target and non-target stocks around the public announcement of activism. Columns (1)-(5) focus on the Ancerno institutions and the last column on the activist hedge funds. Columns (2) and (3) show that institutions generally demand liquidity when selling both target and non-target stocks (i.e., their transaction costs are positive and statistically significant), consistent with the findings of Campbell et al. (2009). The average price impact of institutional sales is highest on the activism event date for both target and non-target stocks (two to three times higher), suggesting that these institutions are impatient on that day, possibly experiencing negative funding shocks.² In Column (5), we formally test the difference in the transaction costs of selling target and non-target stocks, and find that by and large, the differences are not statistically significant. Thus, from transaction cost perspective, institutions trade target and non-target stocks in the same manner.

To ease the comparison with institutional trades, we benchmark hedge fund transaction costs against the same VWAP. The last column shows that hedge funds seem to trade patiently, providing liquidity during the 60 days before the start of a campaign and on the event date (even though the latter lacks statistical significance). This appearance of liquidity provision may be a result of the hedge funds attempting to camouflage their intentions, as predicted by the liquidity theories, by buying when institutions sell and prices hobble near daily lows. It is also interesting to note that the average activist seems to demand liquidity in the days between the event and file dates when he acquires an additional 1.28% of the target's

¹ The Ancerno dataset puts certain limitations on our ability to provide a detailed microstructure analysis. For example, Ancerno often batches together trades that are in the same direction and executed by the same broker on the same day; hence, individual trades and order types (e.g., limit vs. market) cannot be inferred.

² In contrast, institutional buy transactions are usually associated with lower transaction costs (Column (1)), which turn negative on the activism event date. This implies that these institutions are patient in their buy decisions.

outstanding shares. Even though the estimate of transaction costs here is not statistically significant, its large positive magnitude suggests that the average activist turns impatient after crossing the 5% threshold, consistent with the idea that once he has obtained a large enough stake to cover his monitoring costs, he has no need to camouflage his intent and rushes to buy target shares to maximize his expected return.

Why do few institutions sell such a large quantity of target shares on the event date? In a frictionless world, only investors with short-lived information would rush to trade a large quantity of stocks and incur large price impact. In reality, institutions face a number of constraints ranging from funding requirements (Coval and Stafford, 2007) to capital regulations (Ellul, Jotikasthira, and Lundblad, 2011). Such institutional constraints may force institutions to immediately buy or sell assets and concede on price to compensate counterparties for liquidity provision. We argue that negative funding shocks may explain the behavior of top selling institutions on the event date. Notably, these institutions' sales of the targets are relatively small in dollar terms compared to their usual trading volumes and the sales of other stocks. For example, an average top seller sells a total of \$1,079.82 million worth of stocks on the event date, and the target stocks account for only \$1.89 million ($< 0.20\%$).

To summarize, the evidence in Tables IA.VIII and IA.IX suggests that for the most part, institutional trading in target firms is not driven by target-specific information or by hedge fund trading, and hence is likely exogenous to the activism events.

References

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Figure IA.1: Ownership of Hedge Funds and Other Institutions around the Announcement of Activism (Quarterly 13F Reports)

The figure plots changes in the target firms' mean and median ownership of hedge funds and other institutions over the four quarters surrounding the start of an activist campaign. The sample includes 937 campaigns in 2000-2007, for which hedge fund and institutional quarterly ownership data are available from Thomson Reuters-13F. The reference quarter (*Quarter 0*) contains the date of the public announcement (in Schedule 13D filing).

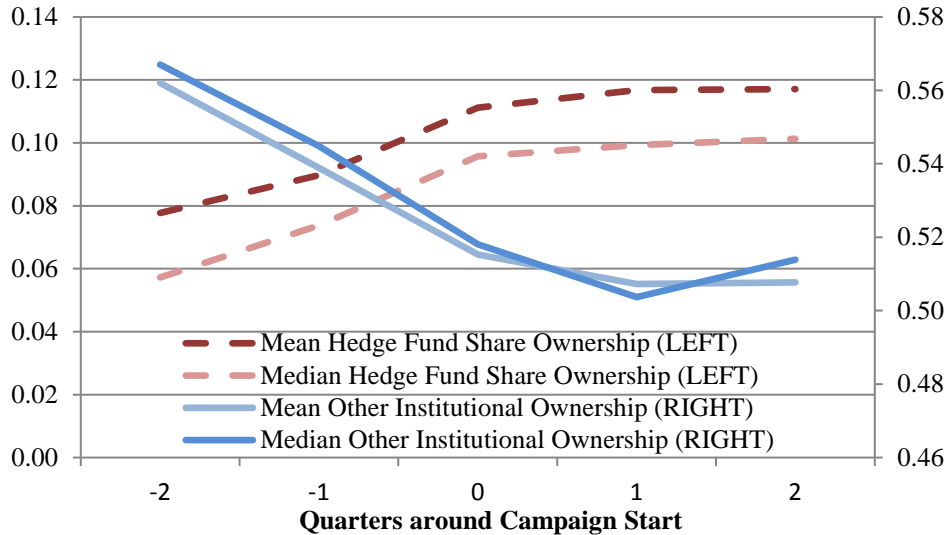


Figure IA.2: Cumulative Abnormal Returns and Hedge Fund Trade Prices

The figure plots the target firms' mean cumulative abnormal returns (CARs) and mean ratio of the hedge fund's (trade size-weighted) trade price to the closing price on the Schedule 13D file date. The sample period is 2000-2007. CARs are calculated by the market-model adjustment approach, in which the CRSP value-weighted index is used as the market portfolio and the loading of each target stock return on the market return is estimated using the period from 600 to 240 days before 13D filing. The mean is calculated across 643 campaigns for which hedge fund trading data are available from 13D reports.

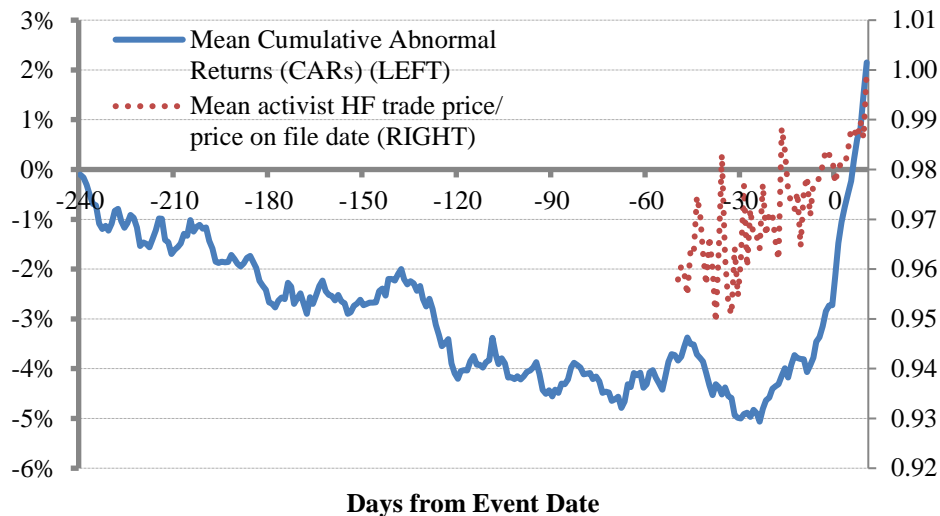


Figure IA.3: Net Trading Volume of Hedge Funds and Other Institutions by Quartiles of Total Hedge Fund Purchases

The figure plots the target firms' mean daily net trading volume (as a percentage of shares outstanding) of activist hedge funds and other institutions during the 60 days before the public announcement of activism in Schedule 13D. The sample period is 2000-2007. The mean is calculated across 643 campaigns sorted into quartiles by the total fraction of shares outstanding purchased by the activist hedge fund (Q1 includes the campaigns with the largest hedge fund purchases). *Event date* (day 0) refers to the date on which the hedge fund's ownership crosses the 5% reporting threshold. Hedge fund trading data are collected from 13D reports and non-hedge fund institutional trades are from Ancerno.

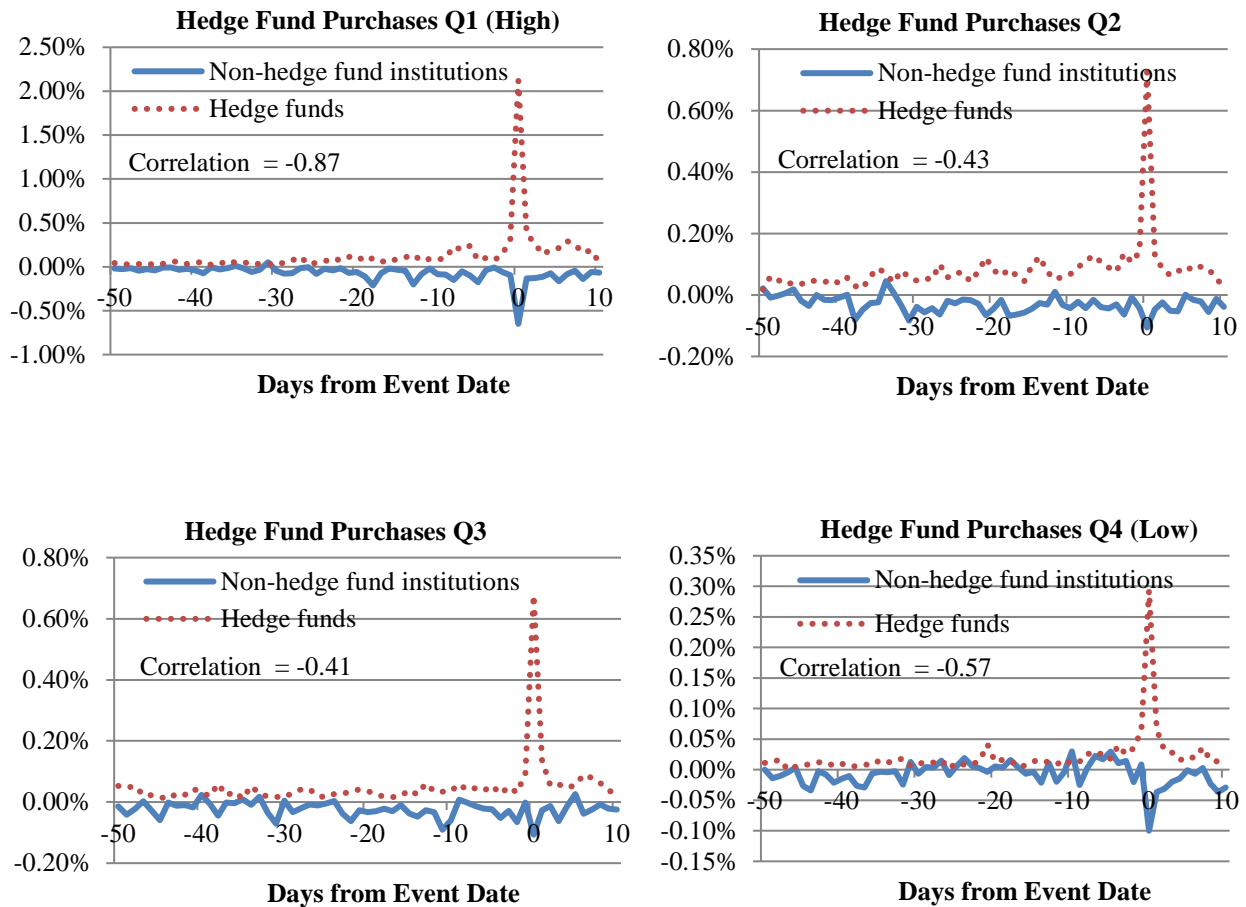
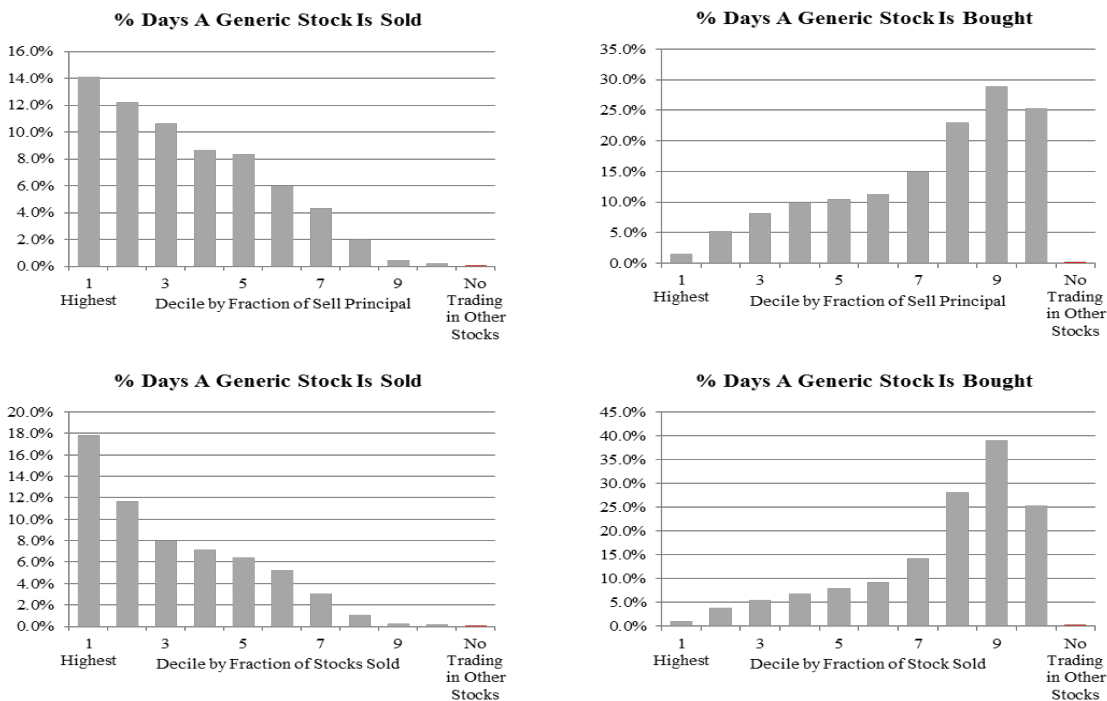


Figure IA.4: Individual Institution's Trading in Generic Stock as Function of Its Trading in Other Stocks

These figures plot the percentages of institution-firm-days (Panel A) and institution-firm-weeks (Panel B) in which a *generic* firm's stock is sold or bought conditional on the institutions' contemporaneous trading patterns in other stocks *outside of the generic firm's SIC-2 industry*. Observations are sorted into deciles by the fraction of other stocks sold measured in terms of \$ principal or number of individual stocks.

Panel A: Daily Frequency



Panel B: Weekly Frequency

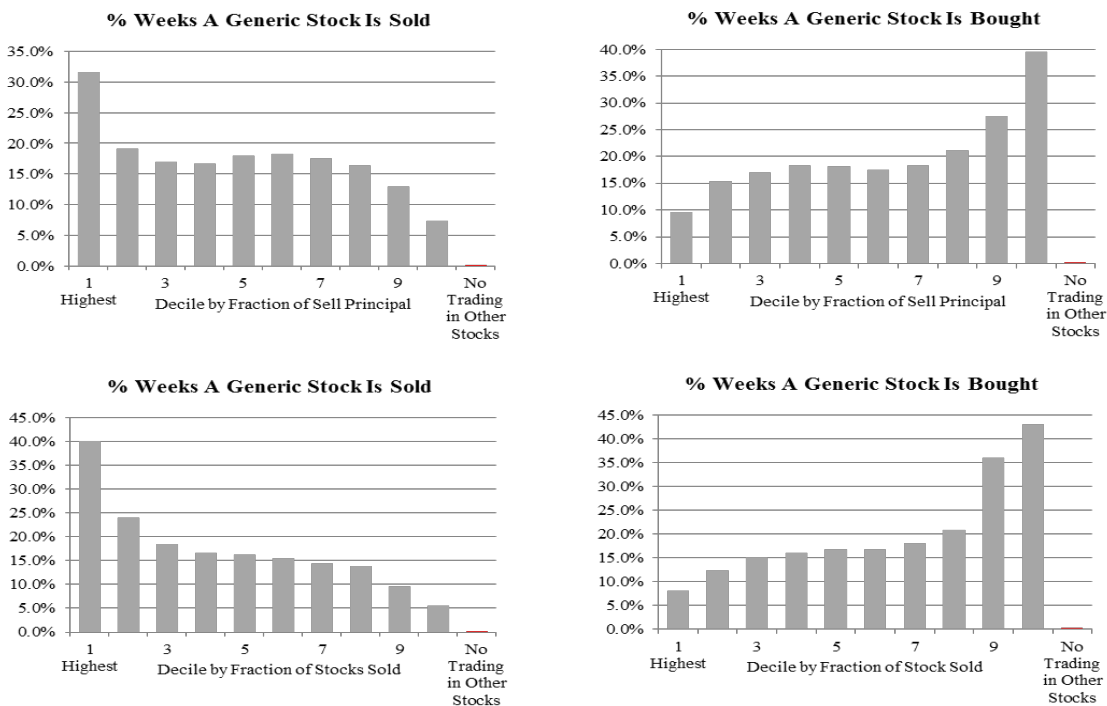


Table IA.I: Characteristics of Target and Non-Target Firms (Full Version of Table 1)

This table reports summary statistics of firm characteristics for the full sample of CRSP-Compustat firms and the subsamples of firms targeted and not targeted by hedge fund activists in 2000-2007. All variables are defined in Appendix A of the paper. Institutional trading data are from Ancerno. Institutional ownership and toehold data are from Thomson Reuters-13F. Mutual fund holdings data are from Thomson Reuters-Mutual Funds.

Panel A: Target Firms

Variable	N	Mean	St. Dev.	5%	25%	Median	75%	95%
log(MV)	755	5.203	1.805	2.397	3.892	5.057	6.440	8.383
Tobin's Q	755	1.914	1.882	0.584	0.971	1.324	2.211	4.736
Leverage	755	0.276	0.269	0.000	0.006	0.231	0.469	0.787
Dividend yield	755	0.008	0.051	0.000	0.000	0.000	0.000	0.033
Sales growth	755	0.168	0.682	-0.399	-0.033	0.062	0.198	0.787
ROA	755	0.049	0.261	-0.314	0.015	0.095	0.167	0.302
R&D/Assets	755	0.056	0.132	0.000	0.000	0.000	0.073	0.245
Inst. ownership	755	0.513	0.289	0.057	0.260	0.507	0.772	0.940
log(Analysts)	755	1.355	1.063	0.000	0.000	1.386	2.197	3.091
-log(Amihud)	755	-1.259	0.924	-3.092	-1.853	-1.074	-0.468	-0.160
Herfindahl index	755	0.037	0.035	0.015	0.024	0.028	0.033	0.133
Return	755	0.057	0.836	-0.693	-0.356	-0.028	0.240	1.016
Inst. buy volume/SHROUT	731	0.024	0.028	0.000	0.003	0.015	0.036	0.081
Inst. sell volume/SHROUT	731	0.030	0.032	0.000	0.005	0.019	0.045	0.094
Inst. net volume/SHROUT	731	-0.006	0.021	-0.041	-0.013	-0.002	0.003	0.022
No. HFs with toehold	461	3.291	2.360	1.000	1.000	3.000	5.000	8.000
HF toehold/SHROUT	461	0.053	0.057	0.001	0.009	0.034	0.076	0.169
ΔMF holdings/SHROUT	636	-0.002	0.011	-0.026	-0.007	0.000	0.002	0.014

Panel B: Non-Target Firms

Variable	N	Mean	St. Dev.	5%	25%	Median	75%	95%
log(MV)	33,164	5.611	2.151	2.191	4.094	5.556	7.014	9.340
Tobin's Q	33,164	2.793	8.744	0.625	1.053	1.530	2.714	7.692
Leverage	33,164	0.300	0.271	0.000	0.024	0.258	0.508	0.796
Dividend yield	33,164	0.010	0.091	0.000	0.000	0.000	0.009	0.041
Sales growth	33,164	0.262	0.822	-0.321	-0.017	0.098	0.270	1.155
ROA	33,164	0.044	0.305	-0.426	0.017	0.095	0.173	0.338
R&D/Assets	33,164	0.082	2.196	0.000	0.000	0.000	0.068	0.306
Inst. ownership	33,164	0.438	0.296	0.014	0.163	0.424	0.696	0.911
log(Analysts)	33,164	1.300	1.093	0.000	0.000	1.386	2.197	3.178
-log(Amihud)	33,164	-1.245	0.980	-3.154	-1.889	-0.973	-0.431	-0.126
Herfindahl index	33,164	0.036	0.037	0.015	0.020	0.027	0.032	0.148
Return	33,162	0.214	1.100	-0.728	-0.261	0.044	0.379	1.618
Inst. buy volume/SHROUT	30,643	0.028	0.038	0.000	0.004	0.017	0.041	0.090
Inst. sell volume/SHROUT	30,643	0.027	0.034	0.000	0.004	0.017	0.039	0.087
Inst. net volume/SHROUT	30,643	0.001	0.029	-0.026	-0.005	0.000	0.007	0.029
No. HFs with toehold	16,032	2.694	2.156	1.000	1.000	2.000	4.000	7.000
HF toehold/SHROUT	16,032	0.021	0.036	0.000	0.002	0.006	0.021	0.102
ΔMF holdings/SHROUT	25,346	0.001	0.009	-0.014	-0.002	0.000	0.004	0.016

Table IA.I, cont'd: Characteristics of Target and Non-Target Firms (Full Version of Table 1)*Panel C: All Firms*

Variable	N	Mean	St. Dev.	5%	25%	Median	75%	95%
log(MV)	33,919	5.602	2.145	2.199	4.088	5.542	7.001	9.317
Tobin's Q	33,919	2.774	8.652	0.623	1.051	1.524	2.700	7.607
Leverage	33,919	0.299	0.271	0.000	0.023	0.257	0.507	0.796
Dividend yield	33,919	0.010	0.090	0.000	0.000	0.000	0.008	0.041
Sales growth	33,919	0.260	0.819	-0.322	-0.017	0.097	0.268	1.145
ROA	33,919	0.044	0.304	-0.424	0.017	0.095	0.173	0.338
R&D/Assets	33,919	0.081	2.171	0.000	0.000	0.000	0.068	0.305
Inst. ownership	33,919	0.439	0.296	0.014	0.165	0.426	0.698	0.912
log(Analysts)	33,919	1.301	1.092	0.000	0.000	1.386	2.197	3.178
-log(Amihud)	33,919	-1.245	0.979	-3.152	-1.888	-0.976	-0.432	-0.127
Herfindahl index	33,919	0.036	0.037	0.015	0.020	0.027	0.032	0.148
Return	33,917	0.211	1.095	-0.727	-0.263	0.042	0.376	1.603
Inst. buy volume/SHROUT	31,374	0.028	0.038	0.000	0.004	0.017	0.041	0.090
Inst. sell volume/SHROUT	31,374	0.027	0.034	0.000	0.004	0.017	0.040	0.087
Inst. net volume/SHROUT	31,374	0.001	0.029	-0.026	-0.005	0.000	0.007	0.029
No. HFs with toehold	16,493	2.711	2.164	1.000	1.000	2.000	4.000	7.000
HF toehold/SHROUT	16,493	0.022	0.037	0.000	0.002	0.006	0.022	0.106
Δ MF holding/SHROUT	25,982	0.001	0.009	-0.014	-0.002	0.000	0.004	0.016

Table IA.II: Effect of Institutional Trading on Activist Targeting – IV Analysis (IV Estimates of Models (2) and (3) in Table 2)

This table reports limited information maximum likelihood (IV-LIML) estimates of the effects of institutional trading on the probability that a firm will become an activist target. The OLS counterparts and the alternative IV results, based on mutual fund flows, are in Table 2. Observations are firm-years. All variables are defined in Appendix A of the paper. The dependent variable is a dummy equal to one if a firm is targeted in an activist campaign in a given year, and the endogenous regressors are institutional net volume (column (2)) and institutional buy and sell volumes (column (5)). Columns (1) and (3)-(4) report estimates of the first-stage equations, in which the endogenous regressors are expressed as a function of the excluded instruments – expected institutional buy and sell volumes calculated as the sums of *individual* institutions’ expected buying and selling in a given stock, conditional on their trading in *other stocks outside the given stock’s SIC-2 industry* (see the Internet Appendix for a detailed description). Columns (2) and (5) report estimates of the corresponding second-stage equations. Inst. net (sell/buy) volume/SHROUT is winsorized at 1%. All columns include year and industry fixed-effects. Robust standard errors, clustered by firm and corrected by Monte Carlo simulation for errors in estimating the expected trading volumes, are in parentheses. *, **, and *** refer to statistical significance at 10%, 5%, and 1% levels, respectively.

	Inst. net volume /SHROUT <i>(1st stage)</i>	Target Dummy <i>(2nd stage)</i>	Inst. sell volume /SHROUT <i>(1st stage)</i>	Inst. buy volume /SHROUT <i>(1st stage)</i>	Target Dummy <i>(2nd stage)</i>
	(1)	(2)	(3)	(4)	(5)
Inst. net volume/SHROUT		-0.118*** (0.035)			
Inst. sell volume/SHROUT					0.127*** (0.049)
Inst. buy volume/SHROUT					-0.153*** (0.037)
Exp (inst sell volume)/SHROUT	-1.712*** (0.243)		1.761*** (0.358)	0.300** (0.146)	
Exp (inst buy volume)/SHROUT	2.379*** (0.219)		0.628*** (0.240)	2.464*** (0.303)	
ΔMF holding/ SHROUT					
Exp (MF fire sales)/SHROUT					
Exp (MF fire purchases)/SHROUT					
-log(Amihud)	0.000 (0.000)	0.004* (0.002)	0.002*** (0.000)	0.003*** (0.001)	0.004* (0.002)
log(MV)	0.001*** (0.000)	-0.008*** (0.001)	-0.000 (0.000)	0.000 (0.000)	-0.008*** (0.001)
Tobin's Q	0.000 (0.000)	-0.000 (0.000)	0.000** (0.000)	0.000** (0.000)	-0.000 (0.000)
Inst. ownership	-0.010*** (0.001)	0.039*** (0.005)	0.031*** (0.002)	0.023*** (0.001)	0.040*** (0.005)

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	Inst. net volume /SHROUT (1st stage)	Target Dummy (2nd stage)	Inst. sell volume /SHROUT (1st stage)	Inst. buy volume /SHROUT (1st stage)	Target Dummy (2nd stage)
	(1)	(2)	(3)	(4)	(5)
Sales growth	0.000 (0.000)	-0.002* (0.001)	0.001*** (0.000)	0.001*** (0.000)	-0.002 (0.001)
ROA	0.001** (0.001)	-0.003 (0.003)	0.004*** (0.001)	0.005*** (0.001)	-0.003 (0.003)
Leverage	0.000 (0.000)	0.001 (0.004)	-0.000 (0.001)	0.000 (0.001)	0.000 (0.004)
Dividend yield	0.000 (0.001)	0.003 (0.010)	-0.004 (0.003)	-0.004 (0.003)	0.002 (0.010)
R&D/Assets	0.000 (0.000)	-0.000** (0.000)	0.000** (0.000)	0.000* (0.000)	-0.000** (0.000)
Herfindahl index	-0.017 (0.024)	0.092 (0.245)	0.042* (0.024)	0.023 (0.025)	0.092 (0.245)
log(Analysts)	-0.001*** (0.000)	-0.001 (0.001)	0.003*** (0.000)	0.003*** (0.000)	-0.001 (0.001)
Return	0.001** (0.000)	-0.001 (0.001)	0.002*** (0.000)	0.002*** (0.000)	-0.001 (0.001)
Year fixed effects	YES	YES	YES	YES	YES
Industry fixed effects	YES	YES	YES	YES	YES
Kleibergen-Paap rank Wald statistic	F(2, 7072) = 60.560 (S-Y crit. val. at 10% maximal size = 8.68)		F(1, 7072) = 19.544 (S-Y crit. val. at 10% maximal size = 7.03)		
Hansen J statistic	$\chi^2(1) = 0.191$		N/A		
Observations	31,374	31,374	31,374	31,374	31,374
R-squared (within)	0.463	0.014	0.696	0.723	0.015

**Table IA.III: Effect of Institutional Trading on Activist Toehold Acquisition and Targeting – IV
Analysis (IV Estimates of Models in Table 3)**

This table reports two-stage pseudo maximum likelihood estimates of discrete-time proportional hazard (complementary log-log) models for activist targeting (Panel A) and for first acquisition of a toehold by a known activism-focused hedge fund (Panel B). The uninstrumented counterparts are presented in Table 3 of the paper. Activism-focused hedge funds are defined as hedge funds that launch more than the median number of campaigns during the sample period. Observations are firm-quarters. All variables are defined in Appendix A. In Panel A, the dependent variable is a “target” dummy, which equals one in the quarter in which a firm is targeted, and 0 in all prior quarters. For each firm, the spell starts when at least one activism-focused hedge fund acquires a toehold in the firm, and ends when the firm is targeted in an activist campaign (i.e., the spell is complete) or when the sample ends (i.e., the spell is right-censored), whichever comes first. Firms with existing activism-focused hedge fund toeholds at the beginning of the sample period in 2000 suffer from left censorship, which is corrected by two approaches to ensure robustness. CORRECTION 1 recovers the first acquisition of a toehold through 13F reports dating back to the first quarter of 1994. CORRECTION 2 drops all left-censored spells. In Panel B, the dependent variable is a “recognition” dummy, which equals one in the quarter in which at least one activism-focused hedge fund acquires a toehold in a firm for the first time, and 0 in all prior quarters. For each firm, the spell starts when the firm becomes exposed to the risk of a toehold acquisition (defined as the time when the firm’s shares become publicly tradable and can be purchased by a hedge fund), and ends when at least one activist has a toehold in the firm (i.e., the spell is complete) or when the sample ends (i.e., the spell is right-censored), whichever comes first. Firms that already exist but are without any activism-focused hedge fund toeholds at the beginning of the sample period in 2000 suffer from left censorship, which is corrected by two alternative approaches. CORRECTION 1 sets the start of a left-censored spell to the first quarter in which the firm appears in CRSP or the first quarter of 1994, whichever comes later. CORRECTION 2 drops all left-censored spells. In both panels, the endogenous regressor is institutional net volume. Columns (1) and (3) report estimates of the first-stage equations, in which institutional net volume is expressed as a function of the excluded instruments – expected institutional buy and sell volumes calculated as the sums of *individual* institutions’ expected buying and selling in a given stock, conditional on their trading in *other stocks outside the given stock’s SIC-2 industry* (models in Columns (3) and (4) of Table IA.VI). Columns (2) and (4) report estimates of the second-stage equations. Inst. net volume/SHROUT is winsorized at 1%. All models specify baseline hazards as piecewise-constant, by including survival duration fixed effects. Survival duration is discrete and measured as the number of quarters from the beginning of the spell. In addition, all models include vintage, calendar year-quarter, and industry fixed effects. All control variables are as of the end of the prior quarter. Robust standard errors, clustered by survival duration and corrected by Monte Carlo simulation for errors in estimating the expected trading volumes, are in parentheses. *, **, *** denote significance at 10%, 5%, and 1%, respectively.

(See next page)

Table IA.III, cont'd: Effect of Institutional Trading on Activist Toehold Acquisition and Targeting – IV Analysis (IV Estimates of Models in Table 3)

Panel A: Failure = First Activist Targeting Firm

	CORRECTION 1		CORRECTION 2	
	Inst. net volume /SHROUT (1st Stage) (1)	Target Dummy (2nd Stage) (2)	Inst. net volume /SHROUT (1st Stage) (3)	Target Dummy (2nd Stage) (4)
Inst. net volume/SHROUT		-2.414*** (0.720)		-2.317*** (0.838)
Exp. (inst. sell volume)/SHROUT	-2.810*** (0.573)		-2.783*** (0.608)	
Exp. (inst. buy volume)/SHROUT	3.989*** (0.436)		4.422*** (0.631)	
-log(Amihud)	-0.001 (0.001)	-0.057 (0.169)	-0.002* (0.001)	-0.210 (0.204)
log(MV)	0.001* (0.000)	-0.422*** (0.083)	0.001*** (0.000)	-0.398*** (0.086)
Tobin's Q	0.000 (0.000)	-0.039 (0.033)	0.000 (0.000)	-0.052 (0.043)
Inst. ownership	-0.010*** (0.002)	1.445*** (0.261)	-0.012*** (0.002)	1.456*** (0.300)
Sales growth	0.000 (0.000)	-0.141 (0.096)	0.000 (0.000)	-0.106 (0.085)
ROA	0.003** (0.001)	-0.413* (0.249)	0.002** (0.001)	-0.476** (0.197)
Leverage	0.002*** (0.001)	-0.236 (0.214)	0.002*** (0.001)	-0.265 (0.251)
Dividend yield	0.001 (0.002)	0.383* (0.224)	0.002 (0.002)	0.423** (0.169)
R&D/Assets	0.003 (0.002)	-0.802 (0.620)	0.002 (0.002)	-0.920 (0.602)
Herfindahl index	-0.047* (0.025)	-4.411 (11.356)	-0.068* (0.039)	-12.747 (14.629)
log(Analysts)	-0.001** (0.000)	0.014 (0.090)	-0.001*** (0.000)	0.062 (0.090)
Return	0.000 (0.001)	-0.240 (0.153)	-0.000 (0.000)	-0.246 (0.153)
Survival duration (in quarters) fixed effects	YES	YES	YES	YES
Vintage fixed effects	YES	YES	YES	YES
Year-quarter fixed effects	YES	YES	YES	YES
Industry fixed effects	YES	YES	YES	YES
Kleibergen-Paap rank Wald statistic	F(2, 55) = 41.846 (S-Y crit. val. at 10% maximal size = 19.93)		F(2, 30) = 37.598 (S-Y crit. val. at 10% maximal size = 19.93)	
Hansen J statistic	$\chi^2(1) = 0.119$		$\chi^2(1) = 0.244$	
Observations	65,370	65,370	47,878	47,878
Pseudo-likelihood ratio statistic	N/A	410	N/A	304

Table IA.III, cont'd: Effect of Institutional Trading on Activist Toehold Acquisition and Targeting – IV Analysis (IV Estimates of Models in Table 3)

Panel B: Failure = First Activism-Focused Hedge Fund Acquiring Toehold in Firm

	CORRECTION 1		CORRECTION 2	
	Inst. net volume /SHROUT (1st Stage) (1)	First Toehold Dummy (2nd Stage) (2)	Inst. net volume /SHROUT (1st Stage) (3)	First Toehold Dummy (2nd Stage) (4)
Inst. net volume/SHROUT		-0.270 (0.660)		1.685 (1.332)
Exp. (inst. sell volume)/SHROUT	-3.185*** (0.702)		-5.975*** (0.522)	
Exp. (inst. buy volume)/SHROUT	3.050*** (0.479)		6.348*** (0.445)	
-log(Amihud)	0.001* (0.000)	0.465*** (0.071)	-0.001 (0.001)	0.872*** (0.160)
log(MV)	0.001*** (0.000)	0.151*** (0.037)	0.001 (0.001)	-0.080 (0.053)
Tobin's Q	0.000* (0.000)	-0.004 (0.004)	0.000 (0.000)	-0.008 (0.008)
Inst. ownership	-0.005** (0.002)	0.626*** (0.087)	-0.004 (0.005)	0.457 (0.280)
Sales growth	0.000* (0.000)	-0.010 (0.019)	0.000 (0.000)	0.018 (0.042)
ROA	0.002*** (0.000)	0.293*** (0.054)	0.004*** (0.001)	0.136 (0.115)
Leverage	-0.001 (0.001)	-0.051 (0.066)	0.003 (0.002)	-0.051 (0.120)
Dividend yield	-0.000 (0.001)	-0.023 (0.379)	0.006 (0.010)	-0.198 (0.706)
R&D/Assets	0.000 (0.000)	-0.004 (0.007)	0.000 (0.000)	-0.003 (0.002)
Herfindahl index	-0.005 (0.038)	6.571 (4.443)	-0.044 (0.081)	2.409 (11.239)
log(Analysts)	0.000 (0.000)	-0.097*** (0.030)	0.002** (0.001)	0.203*** (0.063)
Return	0.001*** (0.000)	0.055*** (0.013)	0.001* (0.001)	0.098 (0.068)
Survival duration (in quarters) fixed effects	YES	YES	YES	YES
Vintage fixed effects	YES	YES	YES	YES
Year-quarter fixed effects	YES	YES	YES	YES
Industry fixed effects	YES	YES	YES	YES
Kleibergen-Paap rank Wald statistic	F(2, 55) = 20.391 (S-Y crit. val. at 10% maximal size = 19.93)		F(2, 27) = 116.420 (S-Y crit. val. at 10% maximal size = 19.93)	
Hansen J statistic	$\chi^2(1) = 1.111$		$\chi^2(1) = 4.306$	
Observations	53,448	53,448	6,009	6,009
Pseudo-likelihood ratio statistic	N/A	4,254	N/A	713

Table IA.IV: Trading in Target Stocks by Top Institutional Sellers and Buyers

This table presents statistics on the top non-activist institutions' combined trading, as a percentage of shares outstanding, in *targets* of activist campaigns. The sample includes 643 campaigns in 2000-2007. In Panel A (Panel B), top institutions are the two largest sellers (buyers) in each target on the event date. In Panel C (Panel D), top institutions are the five largest sellers (buyers) in each target during the 60-day period in which the hedge funds report their trades. For each campaign, days t-60, t-240, and t+30 refer to days -60, -240, and +30 from the Schedule 13D file date, and event date refers to the date on which the hedge fund's ownership crosses the 5% reporting threshold. Institution is a unique combination of client and client manager code in Ancerno.

Event Window	N	Mean	St. Dev.	10%	25%	Median	75%	90%
<i>Panel A: Top 2 sellers (combined) on the event date</i>								
[t-240, t-60)	278	0.00%	1.81%	-0.74%	-0.04%	0.03%	0.28%	1.01%
[t-60, Event Date)	309	-0.44%	1.31%	-1.55%	-0.43%	-0.05%	0.00%	0.11%
Event Date	365	-0.44%	1.72%	-0.96%	-0.29%	-0.07%	-0.02%	0.00%
(Event Date, File Date]	224	-0.35%	0.67%	-1.12%	-0.35%	-0.08%	-0.01%	0.00%
[t-60, File Date]	365	-1.02%	2.72%	-2.79%	-0.95%	-0.25%	-0.03%	0.00%
(File Date, t+30]	207	-0.38%	0.88%	-1.21%	-0.45%	-0.05%	0.00%	0.02%
<i>Panel B: Top 2 buyers (combined) on the event date</i>								
[t-240, t-60)	242	0.26%	1.19%	-0.08%	0.00%	0.05%	0.20%	0.68%
[t-60, Event Date)	298	0.32%	1.21%	-0.01%	0.01%	0.05%	0.21%	0.72%
Event Date	343	0.13%	0.33%	0.00%	0.00%	0.02%	0.10%	0.32%
(Event Date, File Date]	241	0.17%	0.62%	0.00%	0.00%	0.01%	0.09%	0.46%
[t-60, File Date]	343	0.53%	1.55%	0.00%	0.02%	0.08%	0.43%	1.11%
(File Date, t+30]	266	0.09%	0.57%	-0.13%	0.00%	0.01%	0.04%	0.22%
<i>Panel C: Top 5 sellers (combined) during t-60 to the file date</i>								
[t-240 to t-60)	536	0.26%	2.30%	-1.62%	-0.35%	0.06%	0.81%	2.32%
[t-60 to Event Date)	578	-2.11%	3.08%	-5.13%	-2.62%	-1.11%	-0.38%	-0.06%
Event Date	237	-0.69%	2.48%	-1.72%	-0.44%	-0.13%	-0.04%	-0.01%
(Event to File Dates]	371	-0.85%	1.88%	-2.25%	-0.72%	-0.24%	-0.05%	-0.01%
[t-60 to File Date]	595	-2.86%	4.03%	-6.72%	-3.70%	-1.59%	-0.51%	-0.13%
(File Date to t+30]	367	-0.50%	1.14%	-1.46%	-0.57%	-0.09%	0.00%	0.05%
<i>Panel D: Top 5 buyers (combined) during t-60 to the file date</i>								
[t-240, t-60)	489	0.72%	1.63%	-0.32%	0.01%	0.23%	0.96%	2.64%
[t-60, Event Date)	570	1.36%	2.21%	0.06%	0.23%	0.65%	1.64%	3.56%
Event Date	235	0.16%	0.41%	0.00%	0.00%	0.03%	0.15%	0.38%
(Event Date, File Date]	409	0.44%	1.20%	0.00%	0.01%	0.10%	0.36%	1.05%
[t-60, File Date]	587	1.69%	2.56%	0.09%	0.28%	0.84%	2.09%	4.40%
(File Date, t+30]	464	0.01%	0.82%	-0.57%	-0.09%	0.01%	0.16%	0.62%

Table IA.V: Trading in *Non-Target* Stocks by Top Institutional Sellers and Buyers

This table presents statistics on the top non-activist institutions' trading in stocks *not targeted* in activist campaigns in 2000-2007. In Panel A (Panel B), top institutions are the two largest sellers (buyers) in each target on the event date. In Panel C (Panel D), top institutions are the five largest sellers (buyers) in each target during the 60-day period in which the hedge funds report their trades. For each campaign, days t-60, t-240, and t+30 refer to days -60, -240, and +30, respectively, from the Schedule 13D file date, and event date refers to the date on which the hedge fund's ownership crosses the 5% reporting threshold. Institution is a unique combination of client and client manager code in Ancerno.

Event Window	N	Days Traded in Period	Sell Principal/ Total Principal	# Stocks Sold/ # Stocks Traded	Buy Trade Size (\$ Million)	Sell Trade Size (\$ Million)	# Days Traded/ Total # Days in Sample
<i>Panel A: Top 2 sellers (combined) on the event date</i>							
[t-240, t-60)	343	84	49.54%	48.47%	0.418	0.492	53.39%
[t-60, Event Date)	364	28	49.59%	49.25%	0.395	0.448	52.92%
Event Date	356	1	56.47%	58.12%	0.390	0.366	54.26%
(Event Date, File Date]	346	7	51.11%	50.44%	0.404	0.429	54.41%
[t-60, File Date]	365	35	50.41%	49.98%	0.393	0.436	53.27%
(File Date, t+30]	350	17	50.91%	50.94%	0.420	0.476	53.75%
<i>Panel B: Top 2 buyers (combined) on the event date</i>							
[t-240, t-60)	325	87	40.83%	39.68%	0.342	0.719	53.38%
[t-60, Event Date)	340	28	39.34%	37.62%	0.360	0.850	53.36%
Event Date	336	1	31.46%	28.10%	0.311	0.727	53.85%
(Event Date, File Date]	332	8	38.21%	35.61%	0.354	0.965	53.99%
[t-60, File Date]	343	36	38.77%	36.85%	0.340	0.858	53.25%
(File Date, t+30]	337	17	40.11%	38.31%	0.392	1.231	53.59%
<i>Panel C: Top 5 sellers (combined) during t-60 to the file date</i>							
[t-240, t-60)	586	83	49.44%	48.36%	0.459	0.688	52.32%
[t-60, Event Date)	592	28	50.32%	49.81%	0.466	0.543	52.20%
Event Date	572	1	50.58%	50.04%	0.422	0.455	56.26%
(Event Date, File Date]	565	11	50.42%	49.98%	0.449	0.517	53.62%
[t-60, File Date]	595	38	50.55%	50.10%	0.460	0.533	52.11%
(File Date, t+30]	580	17	49.62%	49.22%	0.493	0.561	52.95%
<i>Panel D: Top 5 buyers (combined) during t-60 to the file date</i>							
[t-240, t-60)	578	83	43.53%	41.86%	0.396	0.685	52.53%
[t-60, Event Date)	585	28	43.11%	41.18%	0.446	0.896	52.17%
Event Date	558	1	44.22%	41.89%	0.415	0.625	56.21%
(Event Date, File Date]	557	9	43.20%	41.42%	0.451	1.102	53.83%
[t-60, File Date]	587	36	43.07%	41.14%	0.444	1.205	52.03%
(File Date, t+30]	579	17	44.19%	42.93%	0.445	1.275	52.61%

Table IA.VI: Probability That Individual Institution Will Buy or Sell Generic Stock as Function of Its Trading in Other Stocks

This table reports OLS estimates for linear models of the probability that an institution buys or sells a *generic* stock conditional on its trading in *other stocks outside the generic stock's SIC-2 industry*. Observations are institution-stock-days. All variables are defined in Appendix A. The probabilities of buying and selling are estimated separately. The sample covers (i) all institutions that trade target stocks at least twice during the 60-day period before a campaign file date, and (ii) all stocks traded at least once by these institutions during the 60-day period. For computational reasons, the estimation is performed separately for each calendar quarter during the sample period 2000-2007. Coefficient estimates, averaged across all quarters, are reported. All explanatory variables are contemporaneous, unless noted as lagged. Standard errors, calculated as in Fama and Macbeth (1973), are in parentheses. *, **, and *** refer to statistical significance at 10%, 5%, and 1% levels, respectively.

	Sell Fraction = Dollar Selling Volume/ Total Dollar Trading Volume		Sell Fraction = Number of Stocks Sold/ Total Number of Stocks Traded	
	(1)	(2)	(3)	(4)
	Buy	Sell	Buy	Sell
Dummy[trade other stocks]	0.201*** (0.013)	0.038*** (0.005)	0.226*** (0.013)	0.023*** (0.005)
Dummy[trade other stocks] x Sell fraction	-0.172*** (0.013)	0.119*** (0.007)	-0.228*** (0.016)	0.150*** (0.010)
Dummy[trade only one other stock]	-0.110*** (0.008)	-0.065*** (0.006)	-0.105*** (0.008)	-0.067*** (0.006)
Dummy[sell] 11	0.006 (0.006)	0.306*** (0.010)	0.011* (0.006)	0.304*** (0.010)
Dummy[buy] 11	0.272*** (0.009)	0.006** (0.003)	0.267*** (0.009)	0.008** (0.003)
Dummy[trade other stocks] 11	-0.063*** (0.006)	-0.025*** (0.005)	-0.069*** (0.006)	-0.019*** (0.004)
Dummy[trade other stocks] 11 * Sell fraction 11	0.018*** (0.004)	-0.022*** (0.004)	0.040*** (0.004)	-0.040*** (0.004)
Fraction of trading days during sample	0.003 (0.009)	-0.028*** (0.006)	-0.005 (0.008)	-0.023*** (0.005)
Return 11	0.004 (0.010)	-0.004 (0.008)	0.008 (0.008)	-0.005 (0.009)
CRSP value-weighted return	0.322*** (0.113)	-0.041 (0.060)	0.254** (0.106)	0.004 (0.056)
VIX	0.000 (0.001)	0.000 (0.000)	0.000 (0.001)	0.000 (0.000)
Average N	11,367,529	11,367,529	11,367,529	11,367,529
Average R-squared	0.150	0.144	0.158	0.153

Table IA.VII: Effect of Institutional Trading on Activist Purchases by Level of Activism Benefits
– IV Analysis (IV Estimates of Models in Table 7)

This table reports limited information maximum likelihood (LIML) estimates for regressions of activist purchases of target shares for targets with varying levels of activism benefits. The OLS counterparts are presented in Table 7 of the paper. The sample includes firms targeted by hedge fund activists in 2000-2007. Observations are campaign-days. The dependent variable is net hedge fund volume as a percentage of shares outstanding, and the endogenous regressors are institutional net volume and its interaction with *High benefits dummy*. In Columns (1)-(3), potential benefits from activism are proxied by a firm's propensity to be targeted estimated as in Column (1) of Table 2 of the paper (without institutional trading variables). *High benefits dummy* equals one if the target propensity is greater than the sample median, and zero otherwise. In Columns (4)-(6), the potential benefits are proxied by the total toehold of known activist hedge funds at the end of the most recent quarter before the campaign start. *High benefits dummy* equals one if the total toehold is greater than the sample median, and zero otherwise. Columns (1)-(2) and (4)-(5) report estimates of the first-stage equations, in which the endogenous regressors are expressed as a function of the excluded instruments – (i) expected institutional net volume calculated as the sums of *individual* institutions' expected net trading volume in target stocks, conditional on their trading in *non-target* stocks *outside the target's SIC-2 industry* (models in Columns (3) and (4) of Table IA.VI), and (ii) interaction between the expected institutional net volume and *High benefits dummy*. Columns (3) and (6) report estimates of the second-stage equations. All other variables are defined in Appendix A of the paper. Net hedge fund volume/SHROUT and Inst. net volume/SHROUT are winsorized at 1%. All models include campaign fixed-effects. All explanatory variables are contemporaneous, unless noted as lagged. Standard errors, clustered by campaign and corrected by Monte Carlo simulation for errors in estimating the expected trading volumes, are in parentheses. *, **, and *** refer to statistical significance at 10%, 5%, and 1% levels, respectively.

	<i>Benefits: Target Propensity Score</i>			<i>Benefits: Total Hedge Fund Toehold</i>		
	Inst. net volume /SHROUT (1st stage) (1)	Inst. net x High benefits dummy (1st stage) (2)	Net HF volume /SHROUT (2nd stage) (3)	Inst. net volume /SHROUT (1st stage) (4)	Inst. net x High benefits dummy (1st stage) (5)	Net HF volume /SHROUT (2nd stage) (6)
Inst. net volume/SHROUT			-0.293*** (0.112)			-0.266* (0.137)
Inst. net volume/SHROUT x High benefits dummy			0.193** (0.097)			0.149* (0.076)
Exp. (inst. net volume)/SHROUT	0.420*** (0.054)	-0.004 (0.003)		0.384*** (0.043)	-0.001 (0.002)	
Exp. (inst. net volume)/SHROUT x High benefits dummy	-0.009 (0.071)	0.419*** (0.046)		0.079 (0.073)	0.473*** (0.060)	
Market condition controls	Lags 1 to 5 of net HF volume/SHROUT, lag 1 of inst. sell and buy volumes/SHROUT, CRSP value-weighted return, VIX, adjusted turnover, and lags 1 to 5 of abnormal return and abnormal Amihud					
Campaign-level controls	Campaign dummies					
Kleibergen-Paap rank Wald statistic	F(1, 618) = 40.336 (S-Y crit. val. at 10% maximal size = 7.03)			F(1, 618) = 54.685 (S-Y crit. val. at 10% maximal size = 7.03)		
N	16,274	16,274	16,274	18,117	18,117	18,117
R-squared (within)	0.042	0.035	0.033	0.042	0.044	0.038

Table IA.VIII: Analysis of Institutional Transaction Times in Trading Target and Other Stocks

This table reports mean statistics for institutions' order decision, placement, and execution times in trading activist targets and other stocks. The sample period is 2000-2007, and the sample includes all firms with available trading data from Ancerno. Institutional transactions include all transactions of the top two selling *clientcodes* (in the target stocks) on each campaign event date. Observations are institution-stock-days. For each campaign, day t-60 (t-240) refers to day -60 (-240) from the file date, and event date refers to the date on which the hedge fund's ownership crosses the 5% reporting threshold. Decision time is the time at which the decision to trade is made. Placement time is the time at which the sell-side broker receives the order from the institution. Execution time is the time at which the entire order is completely executed.

Panel A: Institutional SELL Transactions in Target Stocks

Period	N	Decision Time	Placement Time	Execution Time
[t-240, t-60)	6,624	9:37	10:53	14:34
[t-60, Event Date)	1,337	9:37	10:31	15:06
Event Date	494	9:33	10:21	15:10
(Event Date, File Dates]	497	9:34	10:22	15:06
(File Date, t+30]	1,564	9:37	10:40	14:55

Panel B: Institutional SELL Transactions in Other Stocks

Period	N	Decision Time	Placement Time	Execution Time
[t-240, t-60)	3,547,297	9:38	10:45	14:49
[t-60, Event Date)	594,585	9:42	10:42	14:58
Event Date	187,135	9:38	10:40	15:00
(Event Date, File Dates]	205,183	9:38	10:53	14:48
(File Date, t+30]	923,432	9:39	10:40	14:59

Panel C: Institutional BUY Transactions in Other Stocks

Period	N	Decision Time	Placement Time	Execution Time
[t-240, t-60)	3,863,946	9:38	10:29	15:07
[t-60, Event Date)	666,511	9:38	10:24	15:14
Event Date	191,436	9:38	10:34	15:08
(Event Date, File Dates]	253,084	9:34	10:30	15:13
(File Date, t+30]	1,046,921	9:37	10:26	15:15

Table IA.IX: Analysis of Institutional and Hedge Fund Transaction Costs in Trading Target and Other Stocks

This table reports mean statistics for transaction costs incurred by activist hedge funds and other institutions in trading activist targets and other stocks. The sample period is 2000-2007, and the sample includes all firms with available trading data from Ancerno. Institutional transactions include all transactions of the top two selling *clientcodes* (in the targets) on each campaign event date. Hedge fund transactions are available only for the 60-day period immediately preceding the filing date of SEC Schedule 13D. Observations are institution-stock-days or hedge fund-stock-days. For each campaign, day t-60 (t-240) refers to day -60 (-240) from the file date, and event date refers to the date on which the hedge fund's ownership crosses the 5% reporting threshold. Transaction costs are measured as the difference between transaction price and volume-weighted average price (VWAP) on the day of the transaction, expressed as a percentage of VWAP. *, **, and *** refer to statistical significance (of the difference in means, based on standard errors clustered by stock) at 10%, 5%, and 1% levels, respectively.

		Institutions					
Period		(1) BUY Other Stocks	(2) SELL Other Stocks	(3) SELL Target Stocks	(4) Difference (2) - (1)	(5) Difference (3) - (2)	Hedge Funds
(A)	t-240 to t-60	0.016	3.255***	2.854***	3.239***	-0.401	-
(B)	t-60 to Event Date	1.721***	3.003***	2.257	1.282***	-0.746	-50.150**
(C)	Event Date	-1.014***	7.489***	10.709***	8.503***	3.220	-7.302
(D)	Event to File Dates	1.689***	2.881***	-0.236	1.192***	-3.118*	35.765
(E)	File Date to t+30	0.646***	3.234***	4.050***	2.588***	0.816	-
(F)	Difference (B) - (A)	1.705***	-0.252**	-0.597	-1.957***	-0.345	
(G)	Difference (C) - (A)	-1.030***	4.233***	7.855**	5.264***	3.621	
(H)	Difference (D) - (A)	1.673***	-0.374*	-3.090	-2.047***	-2.716	
(I)	Difference (E) - (A)	0.629***	-0.021	1.196	-0.650***	1.217	