

Hedge fund Activism

Updated tables and figures

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March 24, 2012

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The information provided in this file is for educational use only. If you plan to use any information from this document please cite Brav, Jiang, Partnoy, and Thomas (2008) and Brav, Jiang, and Kim (2010), and place the URL in a footnote. Here is a suggested version of the citation:

These results are based on an updated sample [1994-2007] using the same data collection procedure and estimation methods as in Brav, Jiang, Partnoy, and Thomas (2008) and Brav, Jiang, and Kim (2010). For more information please see [Insert the web site URL where this document is located.]

References:

Brav, Alon, Wei Jiang, Frank Partnoy, and Randall Thomas, 2008, Hedge fund activism, corporate governance, and firm performance, *Journal of Finance*, vol. 63, 1729-1775.

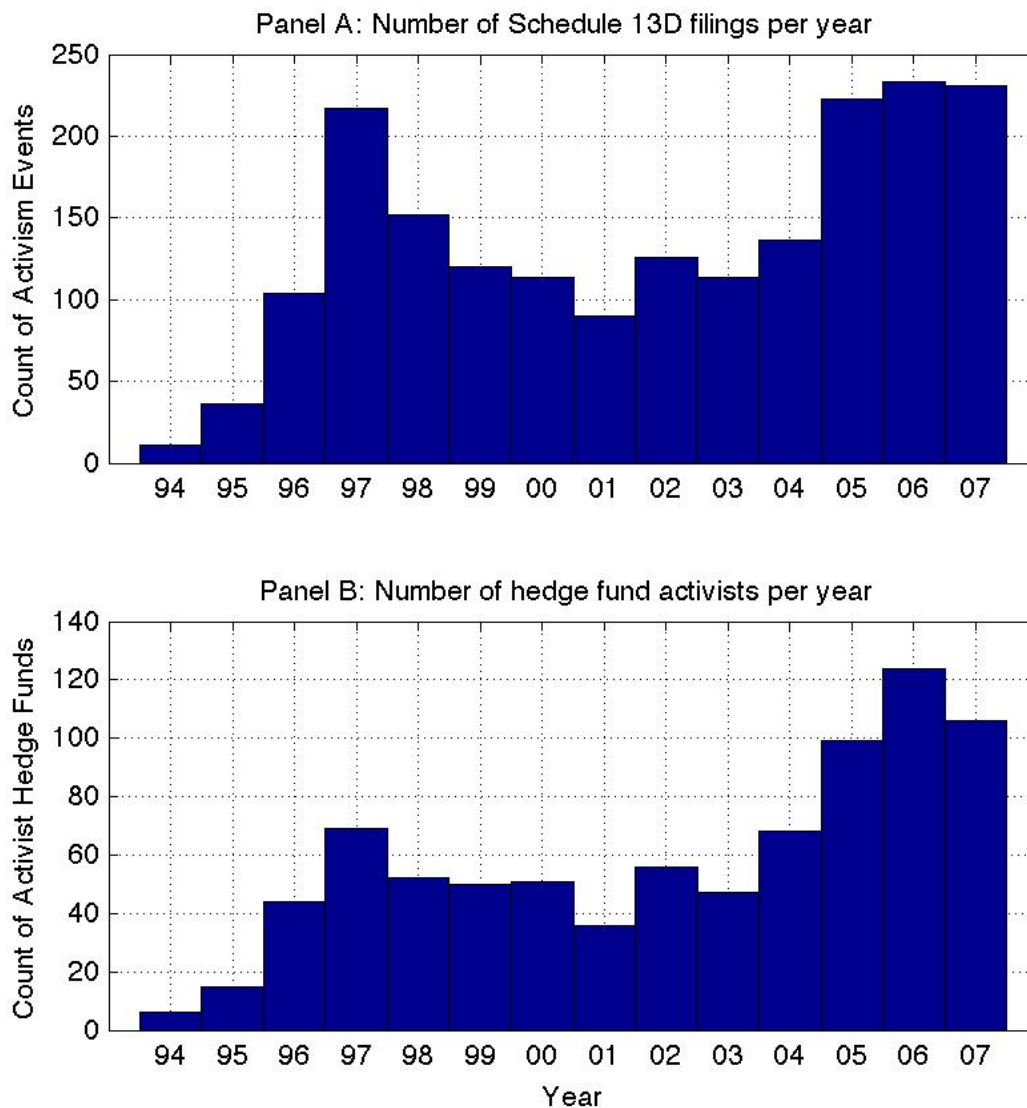
Brav, Alon, Wei Jiang, and Hyunseob Kim, 2010, Hedge fund activism: A review, *Foundations and Trends in Finance*, vol. 4(3), 1-66.

1 Descriptive statistics

1.1 Number of Funds and Schedule 13D filings by Year: 1994-2007

Figure 1: Number of Funds and Schedule 13D filings by Year: 1994-2007

The sample of all Schedule 13D filings over the period 1994-2007 is narrowed down to those by hedge fund managers based on the names and descriptions of the filer type listed in the Schedule's Item 2 (Identity and Background) combined with Internet/news searches of the filers. After excluding filings that involve risk arbitrage, distress financing, and non-regular corporations such as closed-end funds, the final sample consists of 1,927 fund-target firm pairs. See Brav, Jiang and Kim (2010) for additional details on the formation of the sample. The top figure plots the time series of the number of events per year while the bottom figure plots the number of hedge funds filing a Schedule 13D in a given year.



1.2 Summary of Events by Hedge Funds’ Stated Goals and Tactics

Table 1: Summary of Events by Hedge Funds’ Stated Goals and Tactics

The sample includes 1,927 events. Panel A reports the summary of the events sorted by hedge funds’ stated objective. The “General undervaluation” objective includes events in which the hedge fund believes that the company is undervalued and/or that the fund can help the manager maximize shareholder value. All events in this objective category involve either the stated intent for passive engagement or communication with the management. The “Capital structure” category includes activism targeting firms’ payout policy and capital structure in which the hedge fund proposes changes geared toward the reduction of excess cash, an increase in firm leverage, or higher payout to shareholders. It also involves issuance of securities by the target companies, such as modifying seasoned equity offerings or proposing debt restructuring. The “Business strategy” objective includes activism targeting issues related to operational efficiency, business restructuring, mergers and acquisitions, and growth strategies. The “Sale of the target” category involves activism in which hedge funds attempt either to force a sale of the target company to a third party, or, in a small minority of the cases, to acquire the company themselves. The “Governance” category includes events in which hedge funds attempt to rescind takeover defenses, to oust the CEO or chairman, to challenge board independence and fair representation, to demand more information disclosure and question potential fraud, and to challenge the level or the pay-for-performance sensitivity of executive compensation. Percentages sum up to more than 100% since one event can have multiple objectives. However, the first category and the other four categories are mutually exclusive. We report the fraction of events that had begun hostile (“Initially Hostile”) and the fraction of events that had turned hostile (“Ex-post Hostile”) within each category. Panel B provides information on the tactics undertaken by hedge funds, sorted from the least to most aggressive, and the percent of events in each category relative to the full sample. The first tactic category includes events in which the hedge fund states that it intends to remain passive or to communicate with the board/management on a regular basis with the goal of enhancing shareholder value. The second tactic category includes events in which the hedge fund seeks board representation without a proxy contest or confrontation with the existing management/board. The third tactic category includes cases where the hedge fund makes formal shareholder proposals, or publicly criticizes the management and demands change. The fourth category includes events in which the hedge fund threatens to wage a proxy fight in order to gain board representation, or to sue the management for breach of duty. The fifth category includes events in which the hedge fund launches a proxy contest in order to replace the board. The remaining two tactic groups include events in which the hedge fund sues the company with the intention to take control of the company. Activist events can fall within more than one category.

Panel A: Summary of Hedge Funds’ Stated Objectives					
	Full Sample Statistics		Subsample Statistics		
	Number of Events	% of Sample	% initially Hostile	% Ex-post Hostile	
General undervaluation	1277	67	NaN	NaN	
Capital structure	195	10.2	23.6	43.1	
Business strategy	343	18	31.8	58.6	
Sale of target company	254	13.3	26.8	54.7	
Governance	400	21	31.3	61.3	

Panel B: Summary of Hedge Funds’ Tactics		
Tactic categories		% of Events
1. The stake is for investment purposes. Alternatively, the intent is to communicate with the board/management to enhance shareholder value		47.1
2. The hedge fund seeks board representation without a proxy contest or confrontation with the existing management/board		4.6
3. The hedge fund makes formal shareholder proposals, or publicly criticizes the company and demands change		15.6
4. The hedge fund threatens to wage a proxy fight in order to gain board representation, or to sue the company for breach of fiduciary duty etc.		2.9
5. The hedge fund launches a proxy contest in order to replace the board		19.3
6. The hedge fund sues the company		7.5
7. The hedge fund intends to take control of the company, for example, with a takeover bid		3

1.3 Hedge Funds' Capital Commitment and Investment Horizon

Table 2: Hedge Funds' Capital Commitment and Investment Horizon

Panel A provides the size of the hedge funds' stakes both in terms of dollar values (at cost, in 2007 millions of dollars), and as a percentage of the outstanding shares of the target companies. We report the 5th, 25th, 50th (median), 75th, and 95th percentiles of the sample. The Initial columns report the stake that hedge funds take at their initial 13D filing. The "Max" columns report the maximum reported stakes that the funds accumulated in the targets as revealed from subsequent 13D/A filings. Panel B lists the length of holding period (in number of days) at different percentiles of the sample for the subsample that has exit information. Exit date is determined as the date in which there has been a resolution of the activist's demands. If this date is missing we look for the date in which the fund's stake in the target declined to below 5%. We exclude events in which events are still going or the date of exit cannot be firmly determined. In each panel, the statistics for the full sample and the subsample of initially hostile events are reported separately.

Panel A: Hedge Funds' Invested Capital								
Full Sample					Hostile Subsample			
	Initial		Max.		Initial		Max.	
	Percent Ownership	Invested Cap' (in \$1M)	Percent Ownership	Invested Cap' (in \$1M)	Percent Ownership	Invested Cap' (in \$1M)	Percent Ownership	Invested Cap' (in \$1M)
5th	5	1.1	5.3	1.5	4.9	1.5	5.8	2.5
25th	5.4	4	7	5.6	5.6	4.4	7.3	5.7
Median	6.3	10.9	9.5	15.4	6.6	15.4	9.6	29.5
75th	8.8	34	13.8	49.8	8.8	49.2	13.3	94.7
95th	21.4	178.4	31.5	254.5	18.4	255.7	30	330
Average	8.8	49.3	13.1	63.5	8.2	72.6	13.1	81.8

Panel B: Hedge Funds' Investment Horizon (in days)		
	Full Sample	Hostile Subsample
5th	26	16
25th	149	78
50th	375	209
75th	777	472
95th	1964	1548
Average	594	390
Num of Events	1335	176

Synopsis of Table 2: Hedge fund activism does not generally involve controlling blocks. The median initial (maximum) percentage stake that a hedge fund takes in the target is 6.3 (9.5)%. Instead, to facilitate value-enhancing changes as minority shareholders, activists must work with and win support from other shareholders, especially on issues that require shareholder voting. These features distinguish the activist hedge funds from the corporate raiders in the 1980s who sought to obtain full control to internalize all the benefits from their intervention. Moreover, the fact that the median (average) duration of completed interventions is 375 (594) days implies that hedge fund activists are not short-term investors.

1.4 Characteristics of Targeted Firms

Table 3: Characteristics of Target Companies

This table reports the characteristics of target companies and a comparison to a set of matched companies. The first three columns report the mean, median, and standard deviation of the characteristic for the target companies. All potentially unbounded variables are winsorized at the 1% and 99% extremes. Columns (4) through (6) report the average difference between the sample firms and the matched firms (firms in the same two-digit SIC industry and same MV and BM quintiles), the t-statistic for the average difference, and the Wilcoxon signed rank statistic, which is asymptotically normal, for paired difference. Size matching is dropped for MV comparison, and book-to-market matching is dropped for BM and Q analysis. The last five columns list the proportion of target firms that fall into each of the quintile groups formed by the CRSP/Compustat universe. All variables are retrieved from the year prior to the event year (and from the event year if the date item from the year before is missing); or from two years prior to the event year if the first two data items are missing. MV is market capitalization in millions of dollars; Q is defined as (book value of debt + market value of equity)/(book value of debt + book value of equity); BM is the book-to-market ratio defined as (book value of equity/market value of equity); GROWTH is the growth rate of sales over the previous year; ROA is return on assets, defined as EBITDA/assets (averaged between current and prior year); CF is cash flow, defined as (net income + depreciation and amortization)/assets (averaged between current and prior year); STKRET is the stock return. LEV is the book leverage ratio defined as debt/(debt + book value of equity); CASH is defined as (cash + cash equivalent)/assets; DIVYLD is dividend yield, defined as (common dividend)/MV; PAYOUT is the total payout ratio, defined as (sum of common dividend payments and share repurchases)/MV; RND is R&D (missing values are imputed as zeros) scaled by the average of current and lagged assets; HHI is the Herfindahl-Hirschman index of sales in different business segments as reported by Compustat; GINDEX is the Gompers, Ishii, and Metrick (2003) governance index where high index values represent lower shareholder rights or higher management entrenchment; ANALYST is the number of analysts covering the company from I/B/E/S; INST is the proportion of shares held by institutions. The characteristic AMIHU is the Amihud (2002) illiquidity measure, defined as the yearly average (using daily data) of $1000\sqrt{|Return|}/(DollarTradingVolume)$.

Firm Characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Summary Statistics			Difference with matched firms			CRSP/COMPUSTAT quintile breakpoints				
	Mean	Median	Std Dev	Avg. Diff.	t-stat of Diff.	Wilcoxon	% in Q1	% in Q2	% in Q3	% in Q4	% in Q5
<i>MV</i>	602.5	145.6	1300.8	-1030.3	-20.24	-25.31	7.0%	25.8%	30.8%	24.4%	12.0%
<i>BM</i>	0.724	0.587	0.685	0.178	11.32	9.26	11.2%	17.6%	17.5%	22.2%	30.9%
<i>Q</i>	2.072	1.412	2.071	-0.497	-8.27	-8.92	28.8%	20.3%	20.8%	19.0%	10.2%
<i>GROWTH</i>	0.249	0.072	0.837	0.000	-0.01	-11.10	23.9%	21.3%	19.4%	17.3%	17.3%
<i>ROA</i>	0.045	0.082	0.204	0.001	0.15	0.98	13.4%	21.7%	23.0%	22.4%	19.5%
<i>CF</i>	-0.001	0.047	0.217	0.000	-0.06	1.93	14.9%	21.3%	23.1%	22.2%	18.4%
<i>STKRET</i>	0.105	0.087	0.614	-0.039	-2.65	-3.91	26.8%	19.3%	18.5%	15.9%	18.4%
<i>LEV</i>	0.250	0.196	0.257	0.026	4.76	2.18	22.7%	17.9%	20.1%	22.5%	16.7%
<i>CASH</i>	0.181	0.082	0.220	-0.006	-1.23	-5.04	18.1%	20.9%	20.4%	21.4%	19.2%
<i>DIVYLD</i>	0.007	0.000	0.016	-0.002	-5.49	-14.03		85.8%			14.2%
<i>PAYOUT</i>	0.026	0.000	0.058	0.003	1.88	-8.60		60.7%		19.0%	20.3%
<i>RND</i>	0.210	0.000	0.981	0.040	1.70	-13.24	17.8%	26.4%	16.6%	20.1%	19.0%
<i>HHI</i>	0.459	0.344	0.345	-0.020	-2.77	-4.26	24.3%	15.8%	21.8%	9.9%	27.4%
<i>GINDEX</i>	8.916	9.000	2.649	0.365	2.93	2.72	13.0%	17.0%	20.3%	22.1%	27.4%
<i>ANALYST</i>	4.389	2.000	5.873	0.064	0.56	-2.21	0.0%	0.2%	38.0%	37.5%	24.4%
<i>INST</i>	0.421	0.388	0.329	0.072	11.73	12.15	0.0%	11.3%	24.0%	31.6%	33.1%
<i>AMIHU</i>	0.455	0.220	0.611	-0.100	-9.27	-15.39	13.5%	22.9%	24.6%	22.7%	16.3%

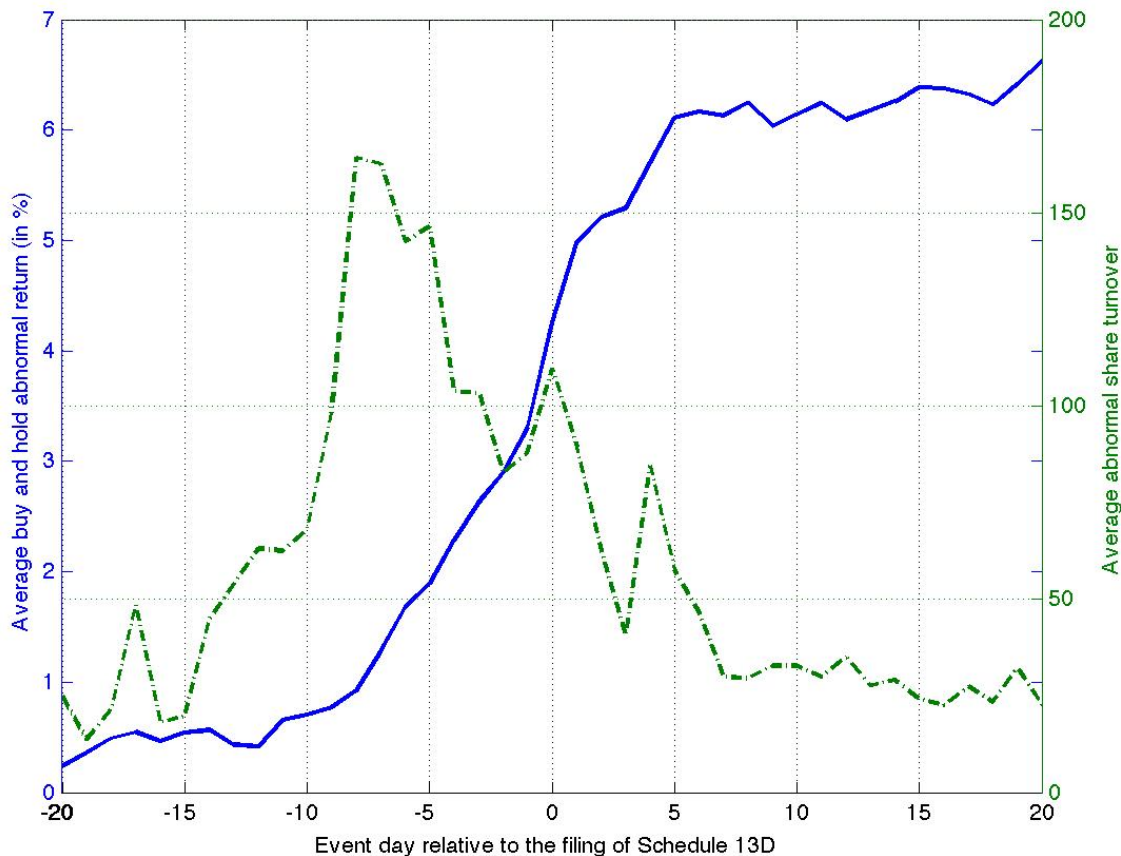
Synopsis of Table 3: Large-cap firms are less likely to be targeted. Moreover, activist hedge funds resemble value investors. Target firms have higher leverage while target their dividend payout is significantly lower relative to that of matched peers. Hence, while target firms do generate cash flow comparable to their matched non-targets, they seem reluctant to payout to investors, a symptom of the agency problem of free cash flow that activists attempt to address. Targets also have significantly higher institutional ownership, which is an important factor for activist hedge funds, since they often rely on the understanding and support from fellow shareholders in order to implement the changes given their minority stakes in the target firms. Target companies exhibit higher trading liquidity than comparable firms. High liquidity makes it easier for the activists to accumulate a stake within a short period of time without incurring adverse market impact. Finally, measured by the governance index that tracks the 24 takeover defenses that firms can adopt and the laws of the state in which the targets are incorporated, target firms tend to have more takeover defenses (or weaker shareholder rights).

2 Short-run Market Reaction

2.1 Buy-and-Hold Abnormal Return Around the Filing of Schedule 13Ds

Figure 2: Buy-and-Hold Abnormal Return Around the Filing of Schedule 13Ds

The solid blue line (left axis) plots the average buy-and-hold return around the filing of the Schedule 13D, in excess of the buy-and-hold return of the value-weight market, from 20 days prior the 13D file date to 20 days afterwards. The dashed green line (right axis) plots the increase in percentage points of the share trading turnover during the same time window compared to the average turnover rate during the preceding (-220, -21) event window.

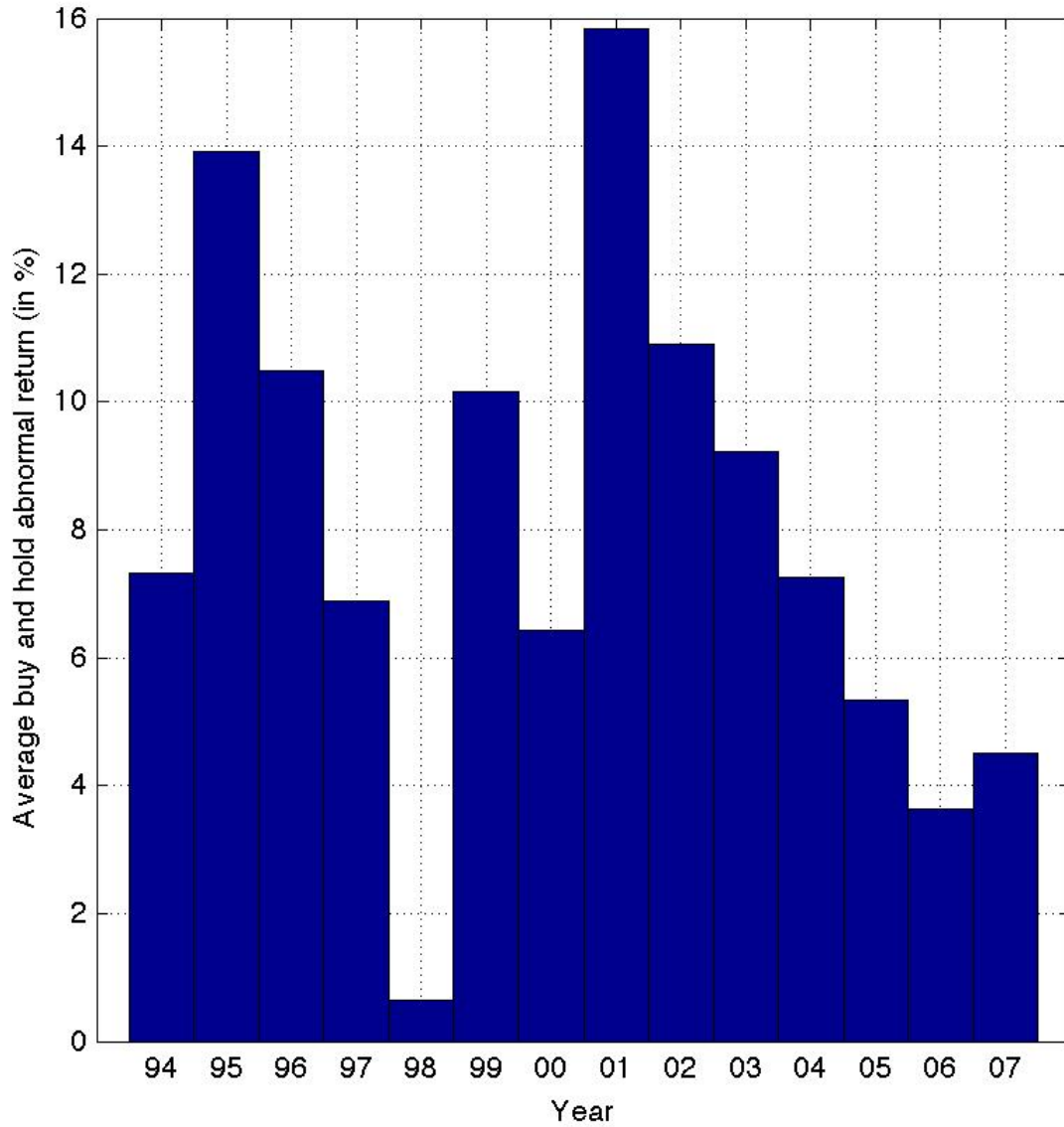


Synopsis of Figure 2: The buy-and-hold abnormal return over the period beginning 20 days prior to the filing of a Schedule 13D to 20 days afterwards is approximately 6.0%. This is consistent with the idea that the market perceives hedge fund activism as value-enhancing. The spike in abnormal trading volume does not occur on the event day but rather during the 10-day period before the filing of the Schedule 13D. The 10-day lead seems to coincide with the fact that investors are required to file Schedule 13D no later than 10 days after the transaction that causes them to go over the 5% threshold. Therefore, it is possible that the filing fund may be engaging in additional buying prior to the announcement of activism.

2.2 Short-run Market Reaction By Year

Figure 3: Short-run Market Reaction By Year

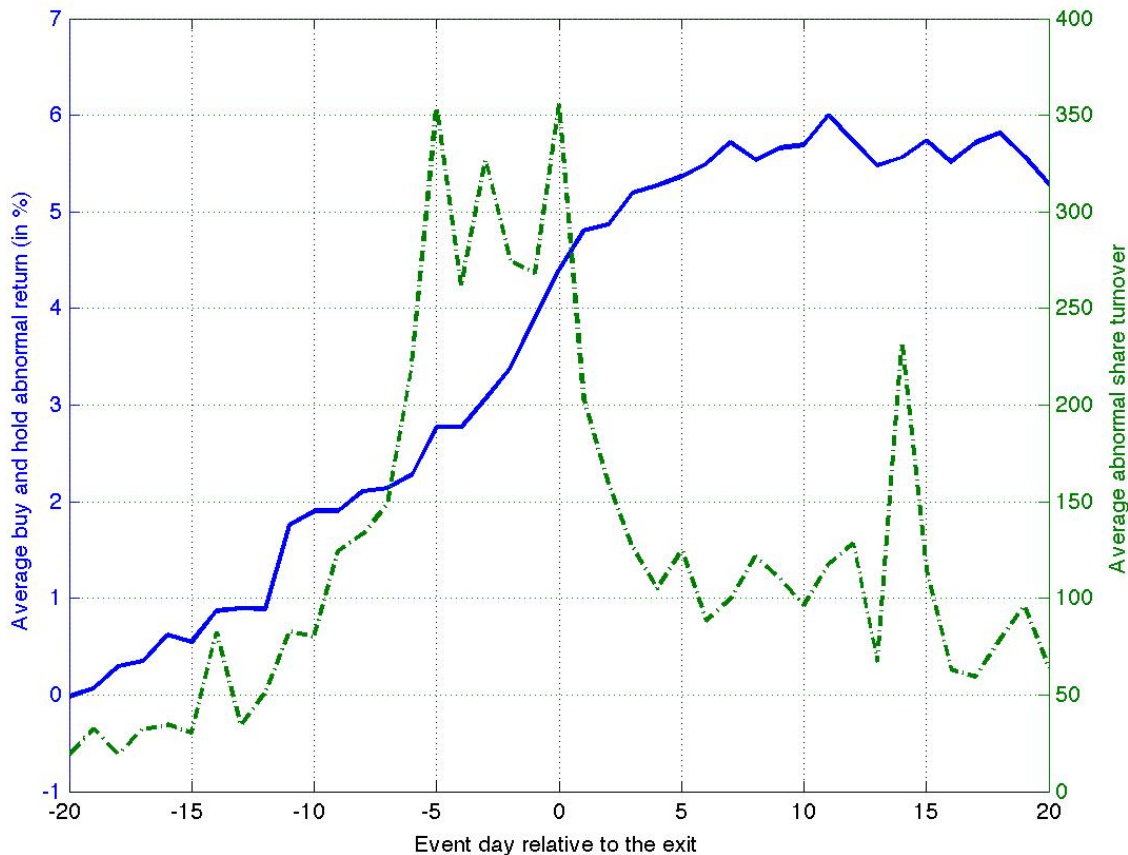
Annual average event day buy-and-hold abnormal returns around the filing of the Schedule 13D in each year from 1994-2007 (See notes to Figure 2 for the calculation of the event returns).



2.3 Buy-and-Hold Abnormal Return Around Activists' Exit

Figure 4: Buy-and-Hold Abnormal Return Around Activists' Exit

The solid line (left axis) plots the average buy-and-hold target return net of the value weight market around activists' exit, defined as the filing of an amendment to Schedule 13D in which the fund reveals that the percent of shares held in the target declined below the 5% reporting threshold. If this date is missing we replace it with the date in which it is announced that the activist has divested its stake in the target (this latter date included events in which the target firm is acquired or liquidated). The event period lasts from 20 days prior to the amendment to the 13D file date to 20 days afterwards. The dashed green line (right axis) plots the increase in percentage points of the share trading turnover during the same time window compared to the average turnover rate during the preceding (-200, -21) event window.



Synopsis of Figure 4: We measure approximately 4% average abnormal returns leading up to the filing date, and roughly flat afterward. Trading volume tends to spike during the 10-day window leading up to the filing. This pattern indicates that hedge funds tend to exit after positive stock returns, and their exit overall does not have a positive or negative impact on the stock price.

3 Longer-term Average Returns

Table 4: Long-term Abnormal Returns

The table reports statistics on long-term abnormal returns associated with targets of hedge fund activism. We report regression estimates and t-statistics from equal- and value-weighted calendar-time portfolio regressions. The 'portfolio holding period,' indicates the holding period in months relative to the month of the hedge fund intervention. For example, the portfolio with holding period +1,+12, continually adds target firms that have had an activist event in the preceding month and holds these firms through a year after their respective activism events. 'Alpha' is the estimate of the regression intercept from the factor models. 'Beta' is the loading on the market excess return (the Fama and French RMRF). 'SMB,' 'HML,' and 'MOM' are the estimates of factor loading on the Fama-French size and book-to-market factors, and the Carhart momentum factor. ' R^2 ' is the adjusted R^2 from the regressions and 'N' is the number of monthly observations. We set a minimum of ten firms per month for all portfolios.

Calendar-time four-factor model regressions								
	Value-Weight portfolios				Equal-Weight portfolios			
	Holding period (in months)				Holding period (in months)			
	[-36,-13]	[-12,-1]	[+1,+12]	[+13,+36]	[-36,-13]	[-12,-1]	[+1,+12]	[+13,+36]
Alpha	-1.16	-1.41	-0.07	0.13	0	-0.24	0	0.31
	-5.45	-5.99	-0.24	0.67	-0.02	-1.2	0	1.48
BETA	1.07	1.1	1.1	0.99	0.92	0.95	0.96	0.9
	18.58	16.9	16.85	22.23	14.01	17.36	17.27	19.36
SMB	0.67	0.41	0.48	0.54	1.06	0.72	0.79	0.85
	11.46	6	6.54	9.73	15.74	12.64	12.56	14.66
HML	0.13	0.57	0.47	0.26	0.4	0.32	0.48	0.33
	1.74	6.74	5.24	4.3	4.78	4.56	6.27	5.28
MOM	-0.04	-0.17	-0.07	-0.01	-0.32	-0.26	-0.25	-0.25
	-1.03	-3.53	-1.29	-0.24	-6.62	-6.63	-5.8	-6.83
R^2	0.79	0.69	0.71	0.82	0.76	0.8	0.79	0.84
N	182	170	165	177	182	170	165	177

Synopsis of Table 4: Alphas in the post-targeting period ([+1,+12] and [+13,+36]) are insignificant implying that prices do not revert to pre-event levels for up to three years after the initiation of activism. Therefore, the evidence clearly refutes the market over-reaction hypothesis and supports the hypothesis that hedge fund activism creates value for shareholders.

4 Target Firm Performance in Years Before and After Targeting by Hedge Fund Activists

Table 5: Target Firm Performance in Years Before and After Targeting by Hedge Fund Activists

This table reports changes in target firm performance in years before and after being targeted by activist hedge funds. Estimates from the following regression are reported:

$$y_{i,t} = \sum_{j=-2}^2 \gamma_j D_{i,j} + \beta_1 \ln(MV_{i,t}) + \beta_2 \ln(Age_{i,t}) + \beta_3 B/M_{i,t} + \alpha_{SIC3} + \alpha_t + \epsilon_{i,t},$$

where i and t are indices for firm and year, respectively. The dependent variable (y) includes measures of firm performance, financial policies and governance. ROA is return on assets defined as the ratio of earnings before interests, taxes, depreciation and amortization over the average of firm assets at the end of the previous and current years. Leverage is the ratio of debt to the sum of debt and equity. Cash is the ratio of cash (and cash equivalent) to total assets. Capex is the ratio of capital expenditure to assets. DivYield is the ratio of dividends to market capitalization. Payout Yield is the ratio of the sum of dividends and share repurchase to market capitalization. CEO Turnover is a dummy variable equal to one if the firm-year observation experiences a change in CEO. Pay-for-Performance is the ratio of equity-based compensation to total CEO compensation. Among independent variables, $D_{i,j}$ is a dummy variable equals to one if firm i was (will be) under hedge fund targeting j years ($j = -2, -1, 0, +1, +2$) relative to the current year. $\ln(MV)$ is the log of market value of equity of the firm. $\ln(Age)$ is the log years of the firm's appearance in the CRSP database. B/M is the ratio of the firm's book value to market value of equity. Finally, α_{SIC3} and α_t represent industry (at the three-digit SIC level) and year fixed effects. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variable	ROA	Leverage	Cash	Capex	Div Yield	Payout Yield	CEO Turnover	Pay-for-performance
Event year - 2	0.015*** [3.11]	0.021*** [3.66]	0.001 [0.13]	-0.077 [-0.52]	-0.09 [-0.87]	-0.111 [-1.03]	0.012 [0.71]	-0.013 [-0.97]
Event year - 1	0.005 [0.93]	0.026*** [4.50]	-0.005 [-1.08]	-0.17 [-1.25]	0.108 [0.94]	0.107 [0.88]	0.033* [1.81]	0.012 [0.84]
Event year	-0.007 [-1.35]	0.026*** [4.58]	-0.005 [-1.18]	-0.305** [-2.03]	0.403*** [2.94]	0.406*** [2.83]	0.059*** [3.01]	0.046*** [2.68]
Event year + 1	0.012*** [2.65]	0.027*** [4.26]	-0.001 [-0.23]	-0.430*** [-2.64]	0.487*** [2.82]	0.543*** [2.94]	0.072*** [3.25]	0.017 [0.85]
Event year + 2	0.015*** [2.71]	0.019*** [2.82]	0.00 [-0.04]	-0.578*** [-3.83]	-0.183 [-1.19]	-0.192 [-1.18]	0.049** [2.34]	0.026 [1.13]
ln(MV)	0.040*** [42.93]	-0.012*** [-13.90]	-0.004*** [-6.03]	0.148*** [8.51]	0.238*** [22.65]	0.241*** [22.06]	-0.009*** [-5.91]	0.051*** [21.50]
ln(Age)	0.022*** [15.06]	0.012*** [8.58]	-0.036*** [-28.38]	-0.528*** [-16.29]	0.322*** [16.78]	0.318*** [16.07]	-0.009*** [-3.93]	-0.013*** [-3.78]
B/M	0.028*** [13.72]	-0.071*** [-30.46]	-0.015*** [-11.47]	-0.508*** [-13.26]	0.501*** [15.64]	0.583*** [16.43]	0.012** [2.35]	0.002 [0.33]
Observations	113,494	116,807	116,792	106,681	116,551	116,245	33,681	23,579
R-squared	0.234	0.25	0.366	0.336	0.156	0.158	0.015	0.195

Synopsis of Table 5: The table provides evidence on changes in target firms' measures of corporate policy and performance. The performance of a targeted firm in a given event year is compared to a matched sample based on the industry, year, book-to-market, firm age, and firm size. The evidence on profitability, as measured by ROA, indicates that targeted companies generally have *higher* operating profitability than their peers two years prior to intervention. However, their performance deteriorates through the event year and roughly recovers to the pre-event level two years after the event. Target firm leverage is higher than that of control firms but this difference remains constant through the event period. The lack of change in leverage indicates that the expropriation of debt holders is unlikely to be a significant source of shareholder gains. The evidence on cash holding indicates that there is no significant difference from control firms throughout the event period. Next, target firms' capital expenditures are significantly reduced relative to control firms from the event year through two years post-intervention consistent with the possibility that targets were investing inefficiently pre-activism. It can also be seen that hedge fund activists force targets to increase payout to shareholders as both the dividend yield and a broader measure of payout that takes repurchases into account, increase significantly in the year of intervention, although by two years post-intervention payout reverts back to that of control firms. Last, CEO turnover is higher for target firms relative to the matched control sample beginning in the year of intervention and remains significantly higher for two-years post-intervention. Pay-for-performance also increases in the year of activists' intervention. Collectively, this evidence supports the hypothesis that hedge fund activism enhances firm performance by reducing agency costs associated with free cash flow and by subjecting managers to increased discipline.

5 13D Reporting Information

5.1 Number of Days between Crossing the 5% Threshold and the Filing of Schedule 13D

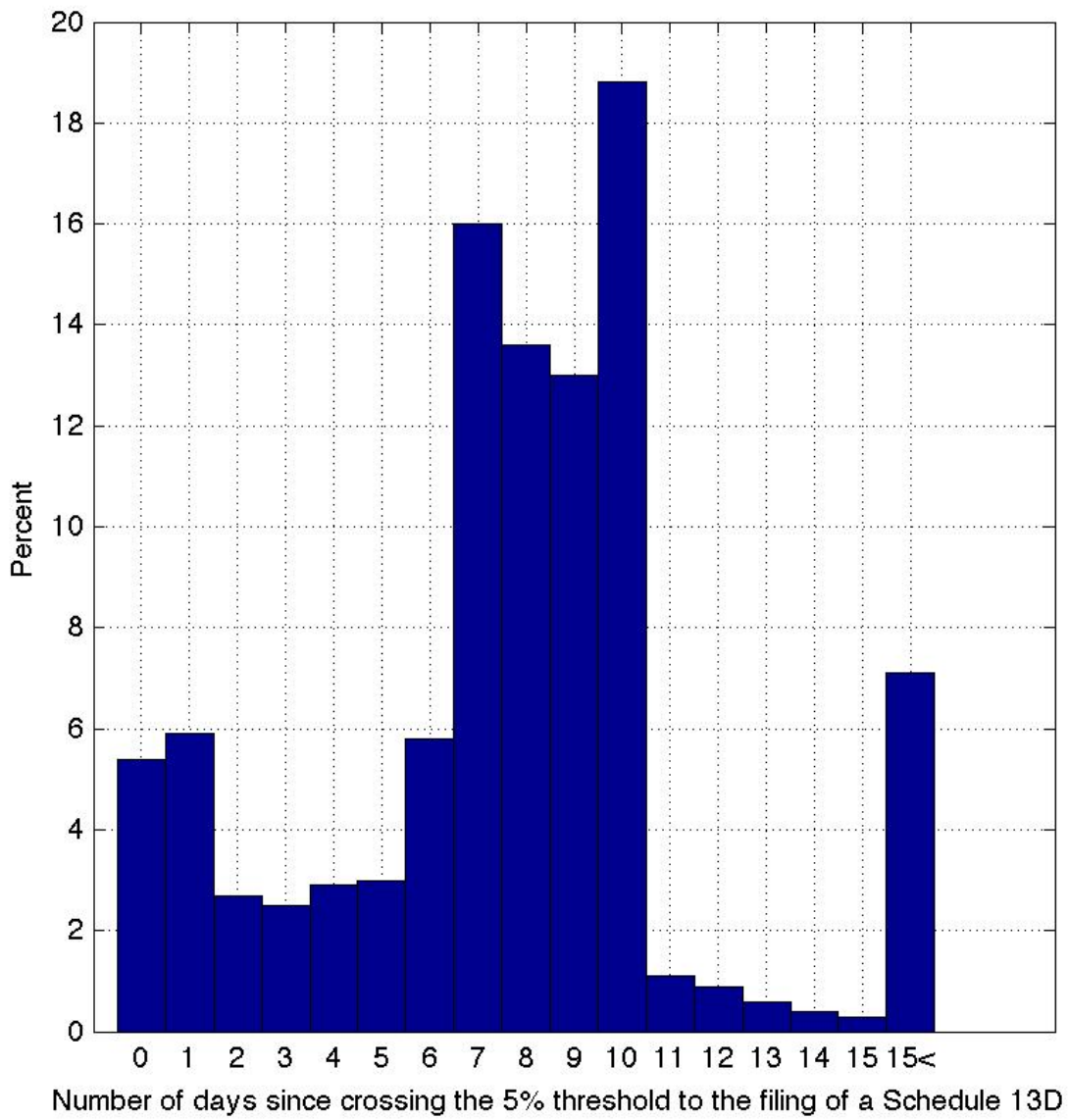
Table 6: Initial Filing of Schedule 13D and the Number of Days Since Crossing the 5% Threshold to File

The sample includes 1,927 hedge fund activism events over the period 1994-2007. For each activism event in which a hedge fund filed a Schedule 13D with the SEC we search EDGAR for the filing date from the “Filing date” on the filing detail webpage. Similarly, we collect for each event the date that triggered the filing, namely, when the activist crossed the 5% ownership, from the item “Date of Event Which Requires Filing of this Statement.” For the 1,890 events with valid date information we then calculate the number of days between these two dates, the “day lag.” The filing of a Schedule 13D on the same day that a fund has crossed the 5% threshold is measured as a 0 lag. For events in which the lag is higher than ten days we replace the day lag with the number of *business days* between the crossing and filing dates. Counting the number of business days rather than actual days allows to adjust downwards for weekends and exchange holidays. Panel A provides the number and sample percentage of events in day-bins ranging from 1 to 15 days and a bin for those events with a day difference beyond 15 days. Panel B provides the distribution of days since crossing the 5% threshold by year from 1994 to 2007. We also report the number of events in each year that exceeds 10 days.

Panel A: Distribution of the number of days (“lag”) since crossing 5% to the filing of Schedule 13D																	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	>
Number of Events	101	111	51	47	54	56	109	299	255	243	352	21	16	11	7	6	132
Percent of Sample	5.4	5.9	2.7	2.5	2.9	3	5.8	16	13.6	13	18.8	1.1	0.9	0.6	0.4	0.3	7.1

Panel B: Yearly distribution of day lag									
Year	Num' of Events	Percentile							Num' of days >10
		5th	25th	50th	75th	95th			
1994	11	1	2.25	4	6.75	89.65			1
1995	35	0	4.5	8	10	14.75			5
1996	102	1	7	9	11	84			26
1997	215	5	7	9	10	55.5			46
1998	146	5	7	9	10	65			32
1999	114	1.2	7	9	10	45.2			16
2000	109	1	7	9	10	23.45			14
2001	88	0.9	6	8.5	10	25			9
2002	126	0.8	5	8	10	32.8			12
2003	110	0	6	8	9	13			7
2004	135	1	5	7	9	10			4
2005	219	0	4	7	9	10			7
2006	231	0	3	7	9	10			8
2007	230	0	3	7	9	10			6

Figure 5: histogram of number of days from the day the 5% threshold was crossed to the filing of Schedule 13D



5.2 Hedge Funds' Percent Ownership at the Time of Their Initial Schedule 13D Filings

Table 7: Hedge Funds' Percent Ownership at the Time of Their Initial Schedule 13D Filings

The sample includes 1,927 hedge fund activism events over the period 1994-2007. For each activism event in which a hedge fund filed a Schedule 13D with the SEC we search EDGAR for the filing date from the "Filing date" on the filing detail webpage. Similarly, we collect for each event the date that triggered the filing, namely, when the activist crossed the 5% ownership, from the item "Date of Event Which Requires Filing of this Statement." For the 1,890 events with valid date information we then calculate the number of days between these two dates, the "day lag." The filing of a Schedule 13D on the same day that a fund has crossed the 5% threshold is measured as a 0 lag. For events in which the lag is higher than ten days we replace the day lag with the number of *business days* between the crossing and filing dates. Counting the number of business days rather than actual days allows to adjust downwards for weekends and exchange holidays. Panel A provides the size of the hedge funds' invested capital as a percentage of the outstanding shares of the target companies at the time of their initial 13D filings. We report the 5th, 25th, 50th (median), 75th, and 95th percentiles as well as the average of the entire sample and for the subsamples of days lags: 0-1, 2-4, 5-7, and 8-10 days. Panel B provides the fraction of events that were either hostile at the outset or turned hostile later for the entire sample ("All Events") as well as for the subsamples of days since crossing the 5% threshold to the filings of the Schedule 13D as in the earlier panel. We define hostile events as those interventions including a threatened or actual proxy contest, takeover, lawsuit, or public campaign that is openly confrontational.

Panel A: Percent ownership sorted by days lag subsamples					
Percentile	All Events	0 - 1	2 - 4	5 - 7	8 - 10
5th	5	5	5	5.1	5.1
25th	5.4	5.4	5.2	5.4	5.4
Median	6.3	7.4	6	6.1	6.2
75th	8.8	9.9	8.8	8.4	8.4
95th	21.4	19.8	20.2	20	21.7
Average	8.8	9	8	8	8.8

Panel B: Initial and ex-post hostility sorted by days lag subsamples										
All Events		0 - 1		2 - 4		5 - 7		8 - 10		
	Initial	Ex-post	Initial	Ex-post	Initial	Ex-post	Initial	Ex-post	Initial	Ex-post
% hostile	11	20.4	19.8	31.1	19.1	27.6	12.1	20.5	8.6	19