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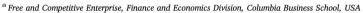
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Activist arbitrage in M&A acquirers[☆]

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ABSTRACT

A relatively understudied activist investor strategy is to purchase shares in the acquirer after an M&A announcement and exercise shareholder rights to change deal terms, or even to block the deal, through public campaigns. We provide new evidence on how the strategy affects target firms and activists' returns. Activists tend to target deals involving defense mechanisms, and smaller acquirers with a history of low returns on invested capital. By blocking some deals and pushing other acquirers to lower their bids, such an "activist arbitrage" strategy yields significant returns and serves as a governance antidote to value-destroying acquisitions.

1. Introduction

In April 2010, Charles River Laboratories International, Inc. ("Charles River"), a U.S. drug research firm, agreed to buy WuXi PharmaTech Inc. ("WuXi"), a Chinese rival, in a cash and stock transaction valued at \$1.6 billion. Charles River's stock dropped 15.7% following the announcement, reflecting investors' disappointment in the deal. In June 2010, JANA Partners, an activist hedge fund, reported a 7.0% stake in Charles River in a Schedule 13D filing, publicizing its intention to vote against the firm's planned share issuance to complete the transaction, and criticizing the proposed price of 16x EBITDA, given WuXi's declining margins and slowing growth. The company's stock jumped nearly 4.0% upon the disclosure. Shortly after, Neuberger Berman LLC and Relational Investors LLC, two hedge funds that, combined, owned 10.3% of Charles River's outstanding stock, also announced their opposition to the acquisition. On July 29, 2010, Charles River terminated the acquisition by paying WuXi a break-up fee of \$30 million, citing shareholders' concerns. Its stock price recovered a large portion of the previous drop and outperformed the S&P 500 index over the same period.

This story is one example of a relatively understudied phenomenon in which investors adopt a non-conventional risk arbitrage strategy in the acquirer firms of announced M&A deals. In a conventional risk arbitrage, an investor takes a long position in the target after an M&A deal is announced, sometimes accompanied by a *short* position in the acquirer. The investor bets on the completion of the deal (and will vote her shares for the deal) and hopes to profit from the price spread convergence. In contrast, in an "activist M&A arbitrage," an investor takes a *long* position in the announced acquirer, aiming at upsetting an announced deal that is expected to be value destroying by using her shareholder rights.

While M&As usually benefit target shareholders thanks to a takeover premium, the effect on acquirer shareholders is far more

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¹ The representative empirical work in this area includes Baker and Serkan (2002), Mitchell et al. (2004), and Hsieh and Walkling (2005).

ambiguous. A large literature (e.g., Lang, Stulz, and Walkling (1989); Morck et al., 1990; Moeller Sara et al., 2005; and Masulis Ronald et al., 2007) demonstrates that managers' desire for personal gains from empire building may lead to acquisitions that are value destroying for the shareholders in public corporations due to a lack of synergy and/or because the proposed deal overpays for the targets. Acquisitions often do not require shareholder voting, or when they do, the voting outcome is usually confirmatory in the absence of a public dissenting voice. Therefore, without an activist leading the opposition, even deals that may not be in the acquiring shareholders' interests usually complete under the management-proposed terms. A new form of "activist arbitrage" in acquirers arises when shareholder activism spreads to M&A activities and blends with traditional risk arbitrage. Between 2000 and 2017, we find that 76 activists challenged 58 public acquirers by exercising their shareholder rights; they advocated for modifications to the announced deals (i.e., lowering the bids), or for terminating deals for which the price was perceived as too high or the promised benefits doubtful.

Our analysis shows that targeted mergers are significantly more likely to be stock deals. The acquirers are more likely to encounter takeover defenses and compete with concurrent bidders, the latter of which is not significant at the 10% level. Importantly, these acquirers also have track records of poor returns on their invested capital. All these characteristics are associated with a heightened risk of overpaying, inefficiency, and, consequently, lower returns for acquirers, as shown by the literature. Targeted acquirers are also smaller in size. In 36% of all targeted deals, activist arbitrageurs manage to block the deals; in comparison, the matched sample without activist intervention has a 91% completion rate. In an additional 17% of the cases, activists are successful in pushing to make the terms more favorable to the acquirers, including lowering the bids. On average, activist arbitrageurs earn a risk-adjusted return that is 6.0 percentage points higher than the matched sample in the post-deal announcement time period. Presumably, the superior returns also accrue to the long-term shareholders of the acquirers. In fact, the market reacts positively to the disclosure of activist involvement: the average abnormal return measured over the 20-day window around the disclosure date amounts to 5.7%.

Our study belongs to the burgeoning literature that analyzes shareholder activism in M&As. It is closely related to, but distinct from, several recent studies. Jiang et al. (2017) study how activist investors profit from combining activism with risk arbitrage in the targets of announced takeovers by improving the terms for target shareholders while this study focuses on the acquirers. Gantchev et al. (2017a) explore the roles activist investors play in facilitating the sale of the companies they engage. Finally, Gantchev et al. (2017a,b) find that acquirers with poorly performing acquisitions and serial acquirers are substantially more likely to become targets of general activism. In comparison, the activists in our sample intervene in deals already announced by the management.

2. Data sources and sample overview

We identify activist M&A arbitrageurs as acquirer shareholders who publicly criticize a transaction or attempt to block an announced deal. Our primary source to identify such events is SharkRepellent – a corporate governance portal – which identifies 58 unique mergers with activist campaigns (76 deal-activist pairs) on the acquirer side during 2000–2017. Activist M&A arbitrage activity is generally correlated with M&A volumes. Only one acquirer was targeted in 2000, while the peak was reached in 2007 (nine deals). Since 2008, there have been 3.5 targets per year through 2017.

Of the 70 unique investors, most of them (52) are hedge funds, with JANA Partners being the most frequent user of this strategy. We then manually collect activists' ownership stakes, announcement dates (from press releases or Schedule 13D filings if the investors acquired more than 5% of an acquirer), and withdrawal dates, in the cases where the campaigns were unsuccessful. After merging our activist arbitrage data with the SDC M&A database, we are left with 53 deals with information on deal terms.

The average (median) percentage stake that activist arbitrageurs take in an acquiring firm is 7.2% (6.7%), and the average (median) dollar investment amounts to \$259.7 (\$81.0) million. This level of ownership is sizable but represents minority stakes, consistent with that in the general activism space (Brav et al. (2008)). The median duration between deal announcement and initial disclosure of activist ownership is 52 days, and the median duration between initial disclosure of activist holdings and deal resolution is 80 days. In 62% of the targeted deals, shareholder approval is required, because the transactions result in new stock issuances that are 20% or more of the number of shares outstanding.

The most common tactics employed by the activists include: (1) public criticism of the transaction through letters addressed to the acquirer's board and/or shareholders, usually accompanied by press releases or attachments to Schedule 13D filings (47 deals); (2) proxy solicitation intended to veto the deal (17 deals, 14 of which involved proxy contests); (3) proposing alternative acquisitions (4 deals); and (4) lobbying proxy advisory firms like ISS and Glass Lewis in order to influence their institutional shareholder clients. These tactics are similar to those in activist arbitrage on the M&A target side, as documented in Jiang et al. (2017).

Of the 58 deals with activist intervention on the acquirer side, only 23 (or 40%) are completed under their original terms. Ten additional deals went forward under terms modified in favor of the acquirer: In four deals, acquirers lowered their offered price; and in six other deals, the acquirers made other concessions such as promises of future stock repurchases and cost cutting. The remainder of the deals (or 43%) were terminated, among which we only identify four terminations due to other reasons (e.g., market conditions or antitrust issues). In contrast, 82% of the deals in our control sample were completed under the original terms.

² Due to the different characteristics that attract activist intervention on the target vs. the acquirer side, there is no overlap in the samples of deals between the two strategies.

Table 1

Characteristics of Acquirers in Deals with and without Activist Arbitrageurs. This table reports the characteristics of the 53 acquiring companies in proposed M&A deals involving activists that can be matched to the SDC database, and compares them to the 1846 deals with no disclosed activists and top-decile deal values, and a one-to-one matched sample, respectively, from 2000 to March 2017 (due to data availability in the 13F database). The matched company for each acquirer targeted by activists is assigned from the same year, same acquirer's SIC three-digit industry, and the closest in deal value. Activist arbitrageurs are identified through their Schedule 13D filings and press releases. Announcement premium is calculated as $(P_{Offer} - P_{(-1)})/P_{(-1)}$, where P_{Offer} and $P_{(-1)}$ are the initial offer price and previous-day close of the target firm's stock price. *Deal value* (\$ billions) is the total value of consideration paid by an acquirer, excluding fees and expenses. Multiple bidders at announcement is a dummy variable equal to one if multiple bidders compete for a target as of deal announcement. Return on assets (ROA) is defined as the ratio of earnings before interest, taxes, depreciation, and amortization ("EBITDA") scaled by lagged assets. Net investment return is defined as the difference between return on invested capital ("ROIC") and weighted average cost of capital ("WACC"), as defined in Qian and Lei (2017). See Section 3 of the text for details. Stock deal is an indicator if a deal is a pure stock offer. Acquirer pre-deal ownership is the percentage of target shares held by an acquirer prior to an announcement. Friendly is a dummy variable with a value of zero if a target company resists or receives an unsolicited offer, as reported in the SDC. Defense is a dummy variable equal to one if a target firm has used defensive tactics against an acquisition as determined by the SDC. Tender offer is a dummy variable equal to one if a bid takes the form of a tender offer. Same industry equals one if a target and an acquirer are in the same three-digit SIC industry. Market capitalization is in billions of dollars. Relative size equals Deal value divided by Market capitalization. Tobin's q is defined as (book value of debt + market value of equity)/(book value of debt + book value of equity). Institutional ownership is the proportion of shares held by institutional investors, as reported by the Thomson Reuters Ownership Database. Premium revision is calculated as $(P_{Final} - P_{Offer})/P(-1)$, where P_{Final} is the deal price at resolution. Completion rate is the ratio of announced deals that are eventually completed with an initial acquirer to total announced deals. Deal duration is the number of calendar days between the first M&A announcement and the announced resolution of a deal. Finally, ISS "Against" conditional on recommendation is a dummy variable equal to one if Institutional Shareholder Services ("ISS") recommends against a deal requiring shareholder approval, conditional on issuing a recommendation. Glass Lewis "Against" conditional on recommendation is a dummy variable equal to one if Glass, Lewis & Co. ("Glass Lewis") recommends against a deal requiring shareholder approval, conditional on issuing a recommendation. *, ** and *** indicate statistical significance at the 10%, 5% and 1% levels, respectively.

	Merger acquirers targeted by activists $(n = 53)$			Diff. with acquirers in the top decile of deal value without activists ($n = 1,846$)			Diff. with matched acquirers without activists $(n = 53)$		
	Average (1a)	Median (1b)	Std. Dev. (1c)	Average (2a)	Diff. (2b)	t-stat. (2c)	Average (3a)	Diff. (3b)	t-stat. (3c)
Ex ante characteristics									
Announcement premium (when target is public)	23.5%	22.5%	25.0%	30.8%	-7.3%*	-1.71	22.2%	1.3%	0.19
Deal value (\$ billions)	4.1	1.4	6.6	4.6	-0.5	-0.56	3.9	0.2	0.18
% Multiple bidders	9.4%	0	29.5%	5.9%	3.5%	0.86	3.8%	5.7%	1.17
Return on assets (ROA)	5.6%	7.7%	16.5%	12.2%	-6.6%***	-2.91	16.4%	-10.8%***	-3.67
Net investment return	-5.6%	1.6%	24.9%	6.2%	-11.8%***	-3.43	10.4%	-16.0%***	-4.18
% Stock deal	47.2%	0.0%	50.4%	19.8%	27.4%***	3.92	22.6%	24.5%***	2.72
% Acquirer pre-deal ownership	1.0%	0.0%	6.3%	0.8%	0.2%	0.25	1.8%	-0.8%	-0.54
% Friendly	94.3%	1	23.3%	95.0%	-0.7%	-0.21	94.3%	0.0%	0.00
% Tender offer	5.7%	0	23.3%	9.8%	-4.1%	-1.25	5.7%	0.0%	0.00
% Defense	13.2%	0	34.2%	3.4%	9.8%**	2.09	1.9%	11.3%**	2.24
Same industry	50.9%	1	50.5%	53.6%	-2.6%	-0.37	54.7%	-3.8%	-0.39
Market capitalization (\$ billions)	6.2	1.5	12.2	31.6	-25.4***	-12.04	30.0	-23.7***	-3.73
Relative size	214.9%	62.6%	815.8%	71.7%	143.2%	1.28	48.8%	166.2%	1.48
Tobin's q	1.7	1.3	1.3	1.9	-0.3	-1.46	2.0	-0.3	-1.10
Institutional ownership Ex post outcomes	63.9%	68.7%	31.4%	50.3%	1.3%	0.29	56.1%	-3.7%	-0.56
Premium revision (of the target if public)	-3.1%	0.0%	14.2%	1.6%	-4.8%**	-1.98	1.8%	-4.9%*	-1.83
Completion rate	52.8%	1	50.4%	91.4%	-38.6%***	- 5.55	90.6%	-37.7%***	-4.70
Deal duration	185.9	147.0	150.4	133.3	52.6**	2.53	150.3	35.5	1.19
ISS "Against" conditional on recommendation	44.4%	0	51.1%	2.4%	42.1%***	3.48	16.7%	27.8%*	1.69
Glass Lewis "Against" conditional on recommendation	31.3%	0	47.9%	7.4%	23.8%*	1.92	20.0%	11.3%	0.40

3. Characteristics of deals involving activist arbitrageurs

Column (1) in Table 1 reports the characteristics of the event sample, i.e., M&A deals with activist intervention on the acquirer side, based on the 53 event deals that could be matched to the SDC database. Because a majority of the event deals belong to the top decile in terms of deal value and the average deal sizes of the two samples are similar, in column (2) we compare the event sample with non-targeted deals in the top-decile. Finally, in column (3) we present a comparison to a one-to-one matched sample where the matched company for each acquirer targeted by activists is assigned from the same year, same acquirer's SIC three-digit industry, and the closest in deal value.

The results are qualitatively similar whether we compare attributes of event deals to all top-decile sized deals or to one-to-one, matched non-targets, and thus we only discuss the results in column (2) in detail. Relative to deals involving no such investors, deals targeted by activist arbitrageurs are more likely to involve targets with takeover defenses (such as poison pills and fair price

amendments), and deals that involve multiple bidders at announcement (the latter is not significant at the 10% level). This suggests that activist arbitrageurs are more likely to descend on an acquirer when the deal is perceived to be more risky and when the acquiring firm could overpay substantially due to bidding wars. Performance of these acquirers is also worse in terms of return on assets and net investment return, the latter of which is an efficiency measure defined as the return on invested capital ("ROIC") in excess of the weighted average cost of capital ("WACC"). Net investment return captures managerial efficiency in utilizing the acquirer's capital before launching an acquisition (Qian and Lei (2017)). In addition, relative to non-targets, targeted deals are 27.4 percentage points more likely to be a stock deal (significant at the 1% level), reflecting the fact that only stock deals may require a shareholder vote, and so activists could threaten to block a deal more effectively.

On average, targeted acquirers are significantly smaller, consistent with the general pattern found in prior research on activism (e.g., Brav et al., 2008). Interestingly, targeted deals are much larger in relative terms. The average relative size (deal value divided by market capitalization) for targeted deals is 215% whereas the average relative size for the control sample is about 72%. However, the difference is not significant at the 10%.

Importantly, deals in which activists intervene have, on average, a negative premium revision (-3.1%) for the target stock (significantly lower than those for the control samples at the 5% level). This indicates that activist arbitrageurs are often successful in forcing the acquirer to lower its bid for deals that go through. On the other hand, activist intervention is associated with an average duration to deal resolution that is 53 days longer and a 39 percentage point drop in the completion rates (both significant at the 5% level). Thus, activist intervention substantially prolongs the bidding and negotiation processes and increases the risk of losing the deal altogether. Such actions could benefit acquirer shareholders if a substantial portion of the M&A deals are value destroying for acquirer shareholders due to dubious efficiency gain claims and/or overpayment (Moeller Sara et al., 2005). The low average quality of the targeted deals is confirmed by the return analysis in Section 4 below.

Because the issuance of over 20% of outstanding stock necessitates voting approval by a majority (or supermajority) of acquirer shareholders, activists' relationships with leading proxy advisory firms, notably ISS and Glass Lewis, is of particular interest in this setting. We find that ISS and Glass Lewis rarely issue a recommendation against a deal in the absence of public dissent by acquirer shareholders. For example, for the non-event control sample, ISS (Glass Lewis) issues "no" recommendations only 2.3% (7.5%) of the time. When ISS (Glass Lewis) issues a "no" recommendation, the approval rate is 52.0% (64.7%), while it is 86.0% (78.1%) when ISS (Glass Lewis) issues a positive recommendation. Furthermore, negative recommendations, which consist of 44% (31%) of ISS (Glass Lewis) recommendations for event deals, were all issued after activist announcements (with a median delay of 81 (76) days).

For the 22 deals in which vote counts are available, the average approval rate is 77.7%. Four of them failed to obtain shareholder approval and either ISS or Glass Lewis issued a negative recommendation in each case.

4. Returns from activist arbitrage in acquirers

We would like to re-emphasize that the positions activist risk arbitrageurs take in acquirers are the opposite of those taken by the traditional risk arbitrageurs who bet on the spread convergence after deal announcement rather than trying to upset the deal. In a conventional risk arbitrage, an investor pairs a short position in the acquirer with a long position in the target. However, the activist arbitrageurs in acquirers must long the acquirer in order to exercise shareholder rights, advocating for modifications to the terms (i.e., lowering the bids), or for terminating the over-paying deals. Such a critical difference makes activist risk arbitrage a novel addition to the strategy space as well to the literature.

Table 2 reports abnormal returns for activist investors who long acquiring firms and campaign against the proposed deals. In the run-up, i.e., the abnormal returns leading to the deal announcement, we do not find much of a difference between the two groups. However, the deal announcement returns for acquirers targeted by activists is -5.0%, which is -4.9 percentage points lower than that for the control bidders (significant at the 1% level). This suggests that activist arbitrageurs tend to target deals that are not well perceived by acquirer shareholders. Activist arbitrageurs earn a higher average return in the post-deal announcement time period. The average CAR over the [+2, Resolution] window is 1.6% for the activists, greater than a -4.4% average return for investors in the control sample consisting of top-decile non-event deals (significant at the 1% sample) and a -2.1% for those investing in matched deals (but the differences are insignificant). For robustness, we also calculate CAR over the $[\max(+2, \text{Disclosure}-10), \text{Resolution}]$ to mimic the investment horizon of the activists. The difference in the average CARs for activists and other investors is 10.8%, significant at the 10% level. Interestingly, the market's reaction to the mere disclosure of activist involvement is positive: the average

³ Following Qian and Lei (2017), ROIC is calculated as earnings before interest and tax ("EBIT") divided by last year's invested capital ("ICAPT"). WACC is the weighted average of the after-tax cost of debt and the cost of equity. After-tax cost of debt is estimated from interest expenses, total interesting-bearing debt (the sum of current debt and long-term debt), and the marginal tax rate, which is defined as the top statutory federal tax rate plus a 2% average state tax rate, as defined in Nissim and Stephen (2001). Cost of equity is calculated using the capital asset pricing model ("CAPM") while the market premium used in CAPM is the average premium over the risk-free rate over the preceding 30 years and the beta is estimated using a portfolio approach. Following Fama Eugene and French (1992, 1997)Fama and French (1992, 1997), we estimate the individual stock's beta by regressing the returns of the Fama-French 48-industry portfolio to which it belongs on the market excess returns over the past 60 months.

⁴ See Ertimur et al. (2013), Malenko and Yao (2016) and Li (2016) for the influence of leading proxy advisory firms on institutional investors.

⁵ This is not to be confused with activist arbitrageurs in target companies who may take auxiliary short positions in acquirers for stock deals.

⁶ Activists who accumulate a 5% or larger stake in the acquiers have 10 calendar days to disclose their position after crossing the 5% threshold. Hence we subtract 10 days from the disclosure date to approximate the timing of the activists' investments.

Table 2

Cumulative Abnormal Returns from Activist Arbitrage on Acquirers. This table reports cumulative abnormal returns ("CARs") for acquirers held by activist arbitrageurs, and compares them to the 1782 top-decile deals with no disclosed activists, and a matched sample of 41 deals, respectively. The number of observations drops from Table 1 due to the availability of the information required for beta estimation for calculating CARs. Rum-up is defined as the Fama-French and momentum four-factor CAR of an acquirer's stock during the [-54, -1] trading day window relative to the date of the first announcement. Markup is calculated as the four-factor CAR of an acquirer's stock during the [-1, resolution] window, where resolution could be either effective deal completion or withdrawal. Market reaction [-1, +2] is the CAR from one trading day before a deal announcement until the second trading day after the deal announcement. CAR [+2, Resolution] is the CAR from the second trading day after deal announcement to resolution. CAR [max(+2, disc - 10), resolution] is the CAR from the later of ten calendar days before an activist arbitrageur's Schedule 13D filing or two days post deal announcement to ten calendar days after the 13D disclosure. CARs are measured by using the four-factor model with an estimation window of 255 days up to 54 days prior to announcement. In each column we report the summary statistics and the associated t-statistics or Wilcoxon z-statistics (in brackets). *, ** and *** indicate statistical significance at the 10%, 5% and 1% levels, respectively.

	Acquirers held by activist arbitrageurs (n = 41)		Top-decile deals without activists $(n = 1,782)$		Matched deals (n=41)			
	(1a) Mean	(1b) Median	(2a) Mean	(2b) Median	(2c) (1a) - (2a)	(3a) Mean	(3b) Median	(3c) (1a) - (3a)
Run-up [-54, -1]	-0.2%	1.8%	-1.2%**	-0.7%**	0.9%	0.4%	-0.3%	-0.7%
Market reaction $[-1, +2]$	[-0.09] -5.0%***	[0.32] -6.0%***	[-2.43] -0.1%	[-2.12] -0.4%***	[0.36] 4.9%***	[0.16] 0.2%	[-1.33] 0.9%	[-0.18] -5.2%**
Markup [−1, Resolution]	[-2.73] -2.0%	[-2.87] -2.9%	[-0.14] -4.4%***	[- 2.85] - 1.6%***	[– 2.67] 2.4%	[0.20] -1.7%	[-0.15] 0.5%	[-2.39] -0.2%
CAR [+2, Resolution]	[-0.24] 1.6%	[-0.38] 1.0%	[-5.44] -4.4%***	[-5.52] -1.5%***	[0.30] 6.0%	[-0.49] -2.1%	[-0.75] 2.1%	[-0.02] 3.8%
- ,	[0.20]	[0.62]	[-6.14]	[-5.93]	[0.75]	[-0.64]	[-0.37]	[0.43]
CAR $[max(+2, Disc - 10), Resolution]$	6.4% [1.12]	3.4%* [1.84]	-4.4%*** [-6.14]	-1.5%*** [-5.93]	10.8%* [1.88]	-2.1% [-0.64]	2.1% [-0.37]	8.5% [1.29]
CAR [max(+2, Disc - 10), Disc + 10]	5.7%** [2.50]	3.0%** [2.42]						

CAR for the acquirer stocks measured over the 20-day window around the disclosure date is 5.7%, significantly different from zero at the 5% level.

We also calculate annualized returns by dividing CAR [+2, Resolution] by the number of trading days before multiplying it by 252. On an annualized basis, the average return from post-deal annual annualized to resolution for activist arbitrageurs on the acquirer side is 5.5 percentage points higher than that received by acquirer shareholders in deals without activist intervention, supporting the hypothesis that the activist arbitrage strategy has been profitable.

5. Conclusion

In this paper, we provide the first study of activist M&A arbitrage in acquirers, which complements the phenomenon of "activist risk arbitrage" on the target side (Jiang et al., 2017). Activists attempt to block larger deals with characteristics associated with low efficiency and overpayment. Activist arbitrageurs are often successful in forcing the acquirers to lower their bids, resulting in a significant negative premium revision for the target stock on average. On the other hand, targeted deals take longer to complete and the completion rate is also substantially lower. Finally, activist arbitrageurs earn a higher average return than those achieved by other deals of similar size in the same year and industry in the post-deal announcement time period. The market's reaction to the disclosure of activist involvement is also positive. Overall, our evidence indicates that activist M&A arbitrage serves as a governance remedy for acquiring firms' shareholders, as well as a profitable investment strategy for the activists themselves.

Supplementary material

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.frl.2018.07.003.

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