

Follow the Smart Money

Riding the Coattails of Activist Investors

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On October 31, 2012, Netflix's stock rose 13.9% when Carl Icahn, a renowned activist investor, disclosed a substantial stake in Netflix, intending to influence the future direction of the company. In the subsequent month, the stock tacked on an additional 3.1% compared with 0.6% for the S&P 500. This prompts the question: Can profits be made by following the actions of activists? We explored this question by examining a portfolio of firms targeted by activists and found positive excess returns after controlling for market, value, momentum, size, and industry risk characteristics. We hypothesize that activists were able to unlock value in the targets by prompting management to return additional cash to shareholders and to lower their cost of capital via additional leverage to match the level of their risk-matched peers.

Our study also examined (i) the characteristics of the targets pre- and post-activism (ii) the impact of pre-disclosure of positions on subsequent returns prior to activism (iii) the time-variant nature of returns from activism

- One-month after the commencement of activism, the strategy yielded a market-adjusted excess return of 3.4%. After controlling for market, size, value, and industry, the excess return was 2.7%.¹
- Twelve months after the disclosure of activist involvement, the strategy produced an average excess return of 14.1% after controlling for market, size, value, and momentum.²
- There was no evidence that by utilizing Form 13F filings and taking positions in pre-disclosed targets prior to the commencement of activism, increased excess returns.³
- Pre-activism, the targets tended to be (i) small-capitalization (ii) slow-growing (iii) low payout (iv) financially healthy.
- Post-activism, the targets were characterized by having (i) higher financial leverage (ii) lower cash holding (iii) higher payout (iv) no improvement to their financial operations.
- We did not find evidence of return reversal up to two years after activism or of diminished excess returns in 2008 – 2012 vis-à-vis those in 2003 – 2007.

¹ In addition to the market factor, size, value, momentum and industry style factors have been found to be drivers of future returns. See "Common Risk Factors in the Returns on Bonds and Stocks" by Fama and French 1993

² See "On Persistence in Mutual Fund Performance" by Carhart 1997

³ Investment managers who have \$100MM+ in AUM must file Form 13F within 45 days of every calendar quarter end

Smart Money and Activism Investing

With a significant equity stake in a company, activist investors engage in various strategies, including [but not limited to] proxy fights, public campaigns, litigation and negotiations with the hopes of influencing company's future direction such as returning excess cash, lowering the cost of capital, or improving operating efficiency.

Successful activist investors are best known for their deep industry knowledge, thorough fundamental analysis, and tough negotiation tactics. They are frequently referred to as the sophisticated fundamental investors or the "smart money". Their ability to move the market is evident as we have witnessed high profile activists such as Carl Icahn's involvement with Netflix. Netflix's shares soared after the public disclosure of Icahn's stake, even before he had a chance to discuss the nature of his campaign.

We based our investment hypothesis on the following two main assumptions. In the short-horizon, public disclosure of activism would positively impact stock prices reflecting the potential value-adding changes. In the long-horizon, successful outcome of activists' campaigns would provide additional excess returns to shareholders reflecting the realized value-adding changes.

1. Activism and Returns

We explored the impact of activism on targets' short- and long-horizon returns. Short-horizon is defined as one month or less. Long-horizon is defined as longer than one month.

This study defines the commencement of investor activism as the filing date of the Schedule 13D form, a mandatory SEC filing that an investor must file within ten days after taking a stake equal to or larger than five percent in any publicly traded share class of a listed company with the intention of influencing the company's future direction.

1.1 Short-Horizon Returns Analysis

We conducted an event study to analyze short-horizon returns.⁴ The event date [t0], signifying the commencement of activism, is based on Schedule 13D filing date. Excess returns for target firms were calculated using the following two asset pricing models:

- Market Return Approach: We adjusted the raw returns of target firms by the return of the Russell 3000 index, which we used as a proxy for the market
- Fama-French Three Factors and Industry [FF3 + Industry] Approach:⁵ In addition to adjusting for the market return, we also adjusted the raw returns of target firms by the

⁴ An event study examines the behaviors of stock returns around corporate events. See "The Adjustment of Stock Prices to New Information" by Fama et al. 1969

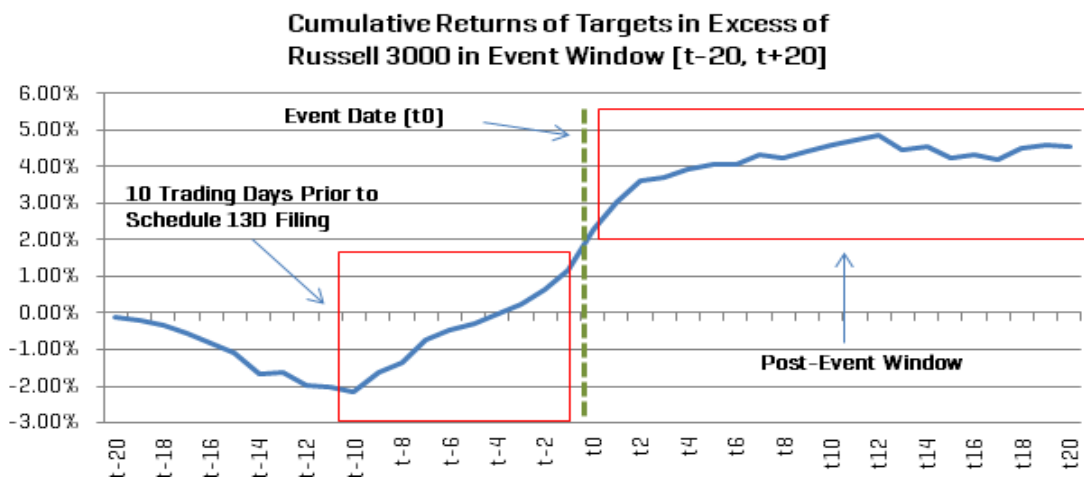
⁵ Fama-French three factors are the market, size and value factors that Fama and French have showed to be important drivers of future stock returns. See "Common Risk Factors in the Returns on Bonds and Stocks" by Fama and French 1993.

returns of targets' risk-matched peers along value, size, and industry (GICS level 3) risk dimensions

Excess returns were calculated using both models over the three event windows: (i) event window [t-20, t+20], which is 20 trading days prior to and after the event date (ii) post-event window [t, t+20], which is event date to 20 trading days after (iii) window [t+2, t+20], which is 2 trading days post-event date to 20 trading days post-event date.

The analysis showed that positive excess returns were evident for the targets during our examination period 2003 – 2012 [see Figure 1].⁶ The majority of the excess return was generally realized after an activist action was announced (i.e. filing of Schedule 13D). The average market-adjusted return was 4.6% during the entire event window [t-20, t+20], of which 3.4% occurred during the post-event window [t, t+20] [see Figure 1]. In Figure 1, the green dotted line denotes the event date. The red enclosed box to the right of the event date plots the cumulative excess returns during the post-event window [t, t+20]. The red enclosed box to the left of the event date displays the cumulative excess returns ten trading days prior to the event date [t-10, t0]. We tend to attribute the increase in returns during this window to the last minute accumulation by activists prior to their filing of Schedule 13D and to information leakage whether unintentionally or otherwise of the impending activism. The total number of Schedule 13D filings used in Figure 1 is 482. See Exhibit 1 for tabular results.

Figure 1: Cumulative Returns of Targets in Event Window (Trading Days)
Russell 3000 Index, 2003 – 2012



Source S&P Capital IQ Quantamental Research
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⁶ Market-adjusted return is in excess of Russell 3000 index

To simulate the most conservative cost basis that investors were able to enter their positions in the targets, the closing price two trading days after the Schedule 13D filing was used as the beginning price in the returns calculation in the window [t+2, t+20]. The average market-adjusted return during this period was 1.5% with significance at the 5% level. After controlling for the market, value, size, and industry risk characteristics, positive average and median excess returns existed for the targets at the 5% significance level for windows [t-20, t+20] and [t0, t+20]. See Exhibit 1 for tabular results.

Exhibit 1: Short-Horizon (1 Month) Returns Analysis
Russell 3000 Index, 2003 – 2012

	col1	col2	col3	col4	col5	col6
Window (Trading Days)	Average Market Adjusted Returns of Targets	Median Market Adjusted Returns of Targets	Average Difference in Returns Between Targets and Risk-Matched Firms	Median Difference in Returns Between Targets and Risk-Matched Firms	Hit Ratio	Count
[t-20, t+20]	4.6% ***	2.9% ***	3.4% **	2.2% **	54.4% **	482
[t0, t+20]	3.4% ***	1.9% ***	2.7% ***	1.6% **	55.8% ***	482
[t+2, t+20]	1.5% **	0.5%	1.0%	0.3%	52.9% **	482

***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively

Source S&P Capital IQ Quantamental Research

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1.2 Long-Horizon Returns Analysis

1.2.1 Calendar-Time

The Calendar-Time method, also known as Jensen’s alpha, was used to assess long-horizon returns.⁷ In the following analysis, we examined a portfolio of firms targeted by activists over variable look-back [formation] periods and examined their monthly holding period excess returns. For instance, at month t for the 6-month horizon window, the portfolio included constituents that had had a Schedule 13D filing within the past 6 months of month t. Again, we controlled the returns of the targets along the market, size, value and momentum dimensions by risk-adjusting the returns along the Fama-French factors [i.e. Market, Value, Size, and Momentum] in the form of a multivariate linear regression.

The average monthly excess returns ranged from 0.88% to 1.81% significant at the 1% level [Exhibit 2]. We did not observe evidence of mean-reversion in the excess returns. In Exhibit 2, the sensitivities of the market risk premium [col2] are close to one suggesting that the returns of targets moved no more or less extreme than the returns of the market.⁸ The sensitivities of value risk premium [col3] were not significant at the 10% level.⁹ From a risk-based perspective, the lack

⁷ Jensen’s alpha is used to determine excess returns over expected returns from an empirical asset pricing model. See “The Performance of Mutual Funds in the Period 1945 – 1964” by M. C. Jensen 1968

⁸ Market risk premium is the monthly Russell 3000 returns in excess of 1-month Treasury bill

⁹ Value risk premium is the monthly quintile spread sorted in descending order according to book-to-market ratio

of statistical significance signifies the targets were not in financial distress or cheap in relation to their peers. The positive signs on the sensitivities of the size risk premium [col4] indicate that the returns of the targets increased when small-capitalization firms outperformed large-capitalization firms.¹⁰ The sensitivities on the price momentum risk premium [see col5] are negative suggesting that the returns of the targets decreased when high momentum firms outperformed low momentum firms in the past 12 months [see Exhibit 2].¹¹ The monthly hit ratio [see col6] is the percent of months where the excess returns defined as the returns of the portfolio of targets less one-month Treasury bill were positive. The average monthly constituents in the portfolio of targets ranged from 28 for the 3-month horizon to 196 for the 24-month horizon.

Exhibit 2: Long-Horizon Returns Analysis – Calendar Time

Russell 3000 Index, 2003 – 2012

	col1	col2	col3	col4	col5	col6	col7
Horizon (Months)	Average Monthly Excess Returns	Sensitivity to Market Risk Premium	Sensitivity to Value Risk Premium	Sensitivity to Size Risk Premium	Sensitivity to Price Momentum Risk Premium	Monthly Hit Ratio	Average Monthly Count
3	1.81% ***	1.12 ***	0.12	0.29	0.05	68.5% **	28
6	1.14% ***	1.18 ***	0.03	0.25 *	-0.02	66.7% ***	54
12	1.18% ***	1.09 ***	-0.18	0.42 ***	-0.18 *	65.7% ***	106
18	0.96% ***	1.12 ***	-0.06	0.32 ***	-0.11	64.8% ***	153
24	0.88% ***	1.14 ***	-0.03	0.32 ***	-0.10	65.7% ***	196

***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively

Source S&P Capital IQ Quantamental Research

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1.2.2 Buy-And-Hold Abnormal Returns (BHAR)

BHAR simulates what a typical investor would realize by holding a portfolio of targets for an extended period of time after the commencement of activism. We examined a portfolio of targets that had had Schedule 13D filing and held the portfolio for different durations. First, we examined the holding period returns of targets in excess of Russell 3000. The average holding period excess return [see col1 in Exhibit 3] ranged from 5.3% at the 3-month horizon to 13.8% at the 36-month horizon.

The average holding period return generally increased as a function of the portfolio holding duration. We did not observe evidence of mean-reversion. We then examined the average holding period returns of targets in excess of targets' risk-matched peers. Specifically, we formed a long portfolio of targets and a short portfolio of targets' risk-matched peers to control for size, value and industry risk characteristics. The median difference in returns [col4 in Exhibit 3] between the

¹⁰ Size risk premium is the monthly quintile spread sorted in ascending order according to natural log of market capitalization

¹¹ Momentum risk premium is the monthly quintile spread sorted in descending order according to returns 12-month ago to 1-month ago

two portfolios ranged from 5.1% at the 3-month horizon to 17.8% at the 36-month horizon with significance at the 1% level. Starting with the 24-month horizon, median market-adjusted returns [col2 in Exhibit 3] started to become slightly negative but the average market-adjusted returns [col1 in Exhibit 3] were still positive and increasing. This suggests that a subset of the targets generated larger excess returns.

Exhibit 3: Long-Horizon Returns Analysis – BHAR

Russell 3000 Index, 2003 – 2012

	col1	col2	col3	col4	col5	col6
Holding Duration (Months)	Average Market Adjusted Returns of Targets	Median Market Adjusted Returns of Targets	Average difference in returns between targets and their comparables	Median difference in returns between targets and their comparables	Hit Ratio	Count
3	5.3% ***	2.1% ***	8.8% ***	5.1% ***	64.0% ***	478
6	4.8% **	1.8% *	10.9% ***	7.6% ***	61.4% ***	479
12	10.8% ***	1.4%	22.6% ***	11.6% ***	61.9% ***	480
24	8.4%	-1.5%	26.7% ***	15.1% ***	62.4% ***	481
36	13.8% **	-2.8% *	35.9% ***	17.8% ***	62.4% ***	481

***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively

Source S&P Capital IQ Quantamental Research

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1.3 Using 13F to Complement 13D

Often, activists accumulate positions in targets prior to Schedule 13D disclosure. To examine the impact of pre-disclosed positions of targets on their subsequent returns, we analyzed holdings information of the targets in Form 13F in the most recent calendar quarter filed at least 45 days prior to the Schedule 13D filing. Form 13F is a SEC mandated form that institutional asset managers who have \$100MM+ AUM are required to file within 45 days of every calendar quarter end. To correct for the potential look-ahead bias, a forty-five day lag was applied to the quarter end date to serve as a proxy for Form 13F’s filing date.

Next, we examined excess returns in windows (i) the period between the filing of Form 13F and 1 month post the filing of Schedule 13D, [13F, 13D + 1Mth] (ii) the period between the filing of form 13F and the filing of Schedule 13D, [13F, 13D] (iii) the period between the filing of Schedule 13D and one month thereafter, [13D, 13D + 1Mth]. In other words, we divided the window [13F, 13D + 1Mth] into two more sub-periods, [13F, 13D] and [13D, 13D + 1Mth].

Most of the excess return was realized after the Schedule 13D filing. The average market-adjusted return during the window [13F, 13D + 1Mth] was 3.97%. Out of which, 3.75% came after the Schedule 13D filing [see Exhibit 4]. In fact, the average excess return between the filing of Form 13F and the filing of Schedule 13D [13F, 13D] was 22bps and not statistically significant at the 10% level. More importantly, this suggests that the commencement of activism, as signaled by the Schedule 13D filing was the catalyst for the excess returns in the entire measurement window [13F, 13D + 1Mth]. If this were not the case, we would expect to find excess returns with significance during the window [13F, 13D].

Exhibit 4: Positions Pre-Disclosed in Form 13F
Russell 3000 Index, 2003 – 2012

	col1	col2	col3
Event Windows [Trading Days]	Average Market Adjusted Returns of Targets	Hit Ratio	Count
[13F, 13D+1Mth]	3.97%	51.43% *	175
[13F, 13D]	0.22%	47.43% **	175
[13D, 13D+1Mth]	3.75% **	57.14% ***	175

***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively

Source S&P Capital IQ Quantamental Research

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One may argue that since Form 13F needs to be filed within 45 days of a calendar quarter end. An investor could file anytime within that time frame. The insignificant result in window [13F, 13D] may be attributed to the fact that the excess returns occurred within the 45-day window. Again, we believed that in order for activists to maintain anonymity and thus mitigate the free riding cost, they generally waited until the very last minute to reveal ‘their hand’ and file at the end of the 45-day window. Hence, the 45-day lag would act as a good proxy for the filing date of the Form 13F.

1.4 Time-Variant Nature of Activism Returns

It is also natural to ask whether the activism returns have changed over time. Our sample data spans the 2003 – 2012 time period. We split the period into two sub-periods 2003 – 2007 and 2008 – 2012. Next, we applied our short- and long-horizon returns analysis from section 1 to the sub-periods.

For the short-horizon returns analysis, we examined and compared the averages, medians, and volatilities of the excess returns in the sub-periods. Positive average and median excess returns existed at the 5% significance level for the event window [t-20, t20] and the post-event window [t0, t20] in both sub-periods [see Exhibit 5a].

Exhibit 5a: Short-Horizon Returns Analysis through Time

Russell 3000 Index, 2003 – 2012

	col1	col2	col3	col4	col5	col6	col7	col8
	Market-Adjusted Returns of Targets 2003 - 2007				Market-Adjusted Returns of Targets 2008 - 2012			
Window [Trading Days]	Average	Median	Volatility	Count of Targets	Average	Median	Volatility	Count of Targets
[t-20,t+20]	5.4% ***	3.3% **	26.6%	194	3.5% **	2.3% **	29.6%	332
[t0, t+20]	2.8% ***	1.6% ***	13.7%	194	3.3% ***	1.8% ***	18.4%	332
[t+2,t+20]	1.2%	0.7%	12.4%	194	1.1%	0.0%	12.6%	332

***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively

Source S&P Capital IQ Quantamental Research

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The average and median excess returns in the earlier sub-period were generally larger than those in the latter sub-period, but they were not statistically different at the 10% significance level. Similarly, the volatilities of the excess returns were not statistically significant at the 10% significance level in the [t-20, t+20] and [t+2, t+20] windows [see Exhibit 5b].

**Exhibit 5b: Difference in Average, Median and Volatility of Returns
Between Sub-Periods 2003-2007 and 2008 - 2012**
Russell 3000 Index, 2003 - 2012

	col1	col2	col3
Event Window [Trading Days]	Difference in Average Returns between Two Periods	Difference in Median Returns between Two Periods	Difference in Volatility of Returns between Two Periods
[t-20,t+20]	Not Significant at 10% level	Not Significant at 10% level	Not Significant at 10% level
[t0,t+20]	Not Significant at 10% level	Not Significant at 10% level	Significant at 5% level
[t+2,t+20]	Not Significant at 10% level	Not Significant at 10% level	Not Significant at 10% level

Source S&P Capital IQ Quantamental Research
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For the long-horizon returns analysis, we used Calendar-Time method to examine the average monthly excess returns between the two sub-periods. Similar to the results from the analysis of the entire period 2003 - 2012 [Section 1.2.1 above], positive average monthly excess returns existed at the 10% significance level for all horizons in both sub-periods with the exception of 6-month horizon during 2008 - 2012 [see Exhibit 6]. The average monthly excess returns in the earlier sub-period were larger with difference ranging from 25bps at the 3-month horizon to 35bps at the 18-month horizon. These differences, however, were not statistically significant at the 10% level.

Exhibit 6: Long-Horizon Returns Analysis through Time
Russell 3000 Index, 2003 - 2012

	Col1	Col2	Col3
Horizon [Months]	Average Monthly Excess Returns 2003 - 2007	Average Monthly Excess Returns 2008 - 2012	Difference in Average Monthly Excess Returns 2003-2007 vs. 2008 - 2012
3	1.87% **	1.61% ***	0.25%
6	1.43% *	0.74%	0.69%
12	1.15% **	0.90% **	0.25%
18	1.00% **	0.65% *	0.35%

***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively
Source S&P Capital IQ Quantamental Research
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1.5 Summary

The results demonstrated both short- and long-horizon positive excess returns, significant at the 5% significance level after controlling for market, size, value, momentum, and industry risk characteristics. There was no evidence suggesting mean-reversion in the excess returns. Using Form 13F to complement Schedule 13D, the study found that ensuing excess returns occurred only after the disclosure of activism. Lastly, the results did not suggest that excess returns had diminished or had significantly changed between the sub-periods 2003 – 2007 and 2008 – 2012.

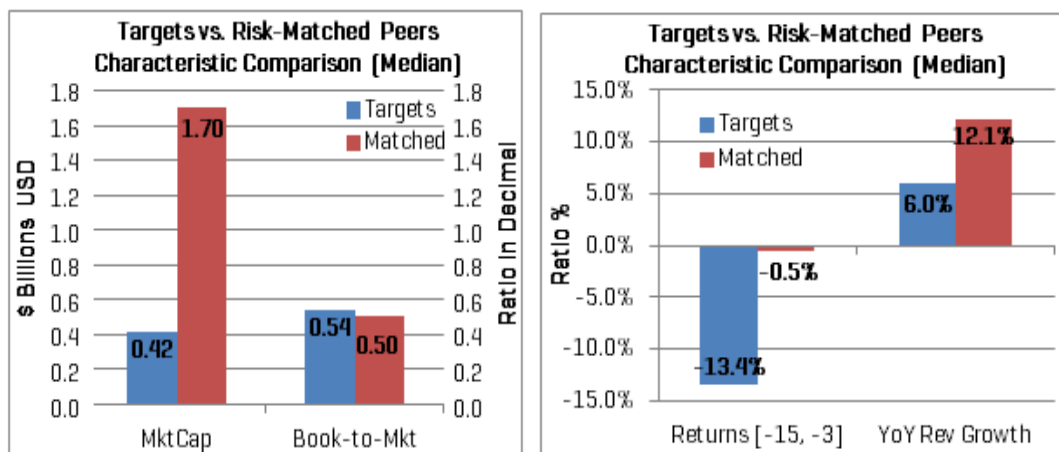
2. Pre-Activism Characteristics of Targets

We explored the pre-activism characteristics of the targets by comparing to those of the targets' peers. The targets' peers were matched along the industry, value, and size risk dimensions. For each target, a group of the target's peers within the same industry level [GICS level 3] was identified. The industry-matched firms were further filtered on 3 x 3 two-way sorts on book-to-market, a proxy for value, and market capitalization, a proxy for size. The median of the characteristics of the risk-matched firms was used to compare against the target's characteristic.

2.1 Size

The targets tended to be small-capitalization firms. For the size characteristic, the matching occurred along the value and industry dimensions only. The average [median] size of the targets was \$1,579MM [\$420MM] whereas average [median] size of the risk-matched firms was \$3,339MM [\$1,704MM]. The median figures are shown in the left column chart of Figure 2. The average and median difference between the targets and the risk-matched firms were statistically significant at the 1% level [see Exhibit 7]. This is in accordance with intuition since accumulating 5%+ shares of large capitalization firms would mean committing a substantial portion of an activist's total AUM and subjecting the portfolio to big idiosyncratic risk.

Figure 2: Pre-Activism Characteristics of Targets
Russell 3000 Index, 2003 – 2012



Source S&P Capital IQ Quantamental Research
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2.2 Valuation

The targets tended to be value-oriented firms. The risk-matching occurred along the size and industry dimensions only. The average [median] book-to-market ratio of the targets was 0.64 [0.54] whereas the average [median] book-to-market ratio of risk-matched firms was 0.60 [0.47]. The median figures are shown in the left column chart of Figure 2. Although the average and median difference between the targets and the risk-matched firms were not statistically significant at the 10% level, the result from a risk-based perspective suggests that the targets were no more or less financially distressed than their peers [see Exhibit 7].

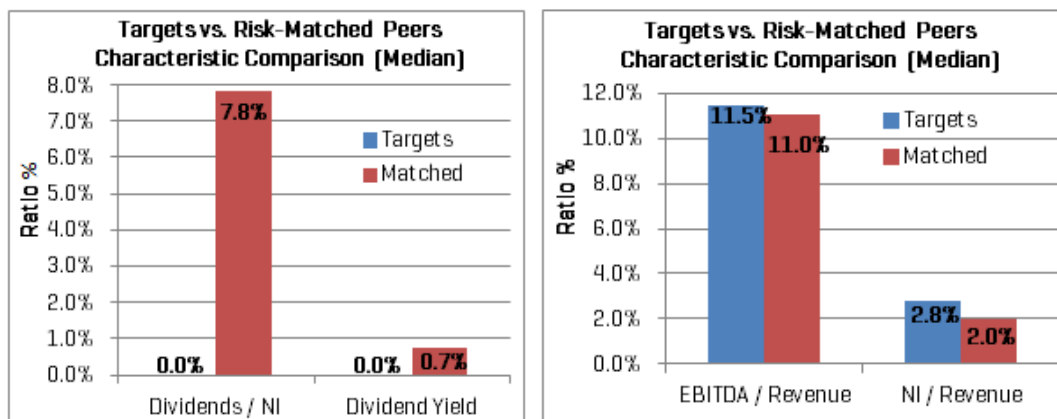
2.3 Momentum

The returns of the targets underperformed relative to the returns of the risk-matched firms between the period 15 months prior to and 3 months prior to [-15, -3] the filing of the Schedule 13D. The median figures are shown in the right column chart of Figure 2. See Exhibit 7 for tabular results of the average and median difference between the characteristics of the targets and their peers.

2.4 Growth

The targets grew slower in terms of year-over-year [YoY] revenue change. The average [median] YoY revenue growth for the targets was 10.1% [6.0%] whereas the average [median] YoY revenue growth for the risk-matched firms was 13.4% [12.1%]. The median figures are shown in the right column chart of Figure 2. The average and median difference were statistically significant at the 5% level [see Exhibit 7].

Figure 3: Pre-Activism Characteristics of Targets
Russell 3000 Index, 2003 - 2012



Source S&P Capital IQ Quantamental Research
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2.5 Dividend Yield and Payout

The targets had lower payout ratio and dividend yield. The average [median] payout ratio for the targets was 11.5% [0.0%] whereas the average [median] payout ratio for the risk-matched firms was 19.1% [7.8%]. Dividend yield revealed the same story. The average [median] dividend yield was 1.0% [0.0%] whereas the average [median] dividend yield for risk-matched firms was 1.6% [0.7%]. The median figures are shown in the right column chart of Figure 3. The average and median difference for both measures were statistically significant at the 1% level. The results suggest that the targets were not returning money to their shareholders at the same level as their peers were. See Exhibit 7 for tabular results of the average and median difference in characteristics between the targets and their peers.

2.6 Margins and Efficiency

The targets' margins and operating efficiencies were not meaningfully different from their peers'. Both the average and median differences of the gross profit and net income margins of the two samples were not significant at the 10% level. The median figures are shown in the right column chart of Figure 3. Similarly, measures of efficiencies, cash flow to one-year lagged assets and EBITDA to one-year lagged assets were not statistically different between the targets and their risk-matched peers at the 10% significance level. The implication is that the targets were relatively financially sound. See Exhibit 7 for tabular results of the average and median difference in characteristics between the targets and their peers.

Exhibit 7: Pre-Activism Characteristics of Targets
Russell 3000 Index, 2003 – 2012

		col1	col2	col3	col4	col5
		Targets		Targets vs. Risk-Matched Firms		
Category	Measure	Average Characteristic	Median Characteristic	Difference in Average Characteristics of Targets and Risk-Matched Firms	Difference in Median Characteristics of Targets and Risk-Matched Firms	Count
Size	MktCap (\$MM)	1578.6	420.1	-1759.9 ***	-1284.1 ***	473
Value	Book-to-Mkt	0.68	0.54	0.04	0.04	473
Mom	rets [-15, -3]	-11.7%	-13.4%	-14.5% ***	-12.9% ***	482
Growth	YoY Revenue Growth	10.1%	6.0%	-3.3% **	-6.1% ***	461
Efficiency	(NI + D&A) _t / Assets _{t-1}	3.1%	5.4%	-1.0%	-0.5%	458
	Cash / Assets	19.4%	10.4%	0.1%	-4.3% ***	466
	EBITDA _t / Assets _{t-1}	9.8%	10.9%	0.1%	0.1%	433
Margins	EBITDA / Revenue	10.2%	11.5%	-0.3%	0.4%	436
	NI / Revenue	-1.6%	2.8%	-1.4%	0.8%	466
Capital Structure	Assets / Equity	2.70	2.04	0.00	-0.09 **	468
	Debt / (Debt + Equity)	32.8%	30.3%	4.2% ***	4.7%	473
Yield and Payout	Dividends / NI	11.5%	0.0%	-7.6% ***	-7.8% ***	472
	Dividend Yield	1.0%	0.0%	-0.6% ***	-0.7% ***	472

***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively

Source S&P Capital IQ Quantamental Research

Past performance is not a guarantee of future results

2.7 Summary

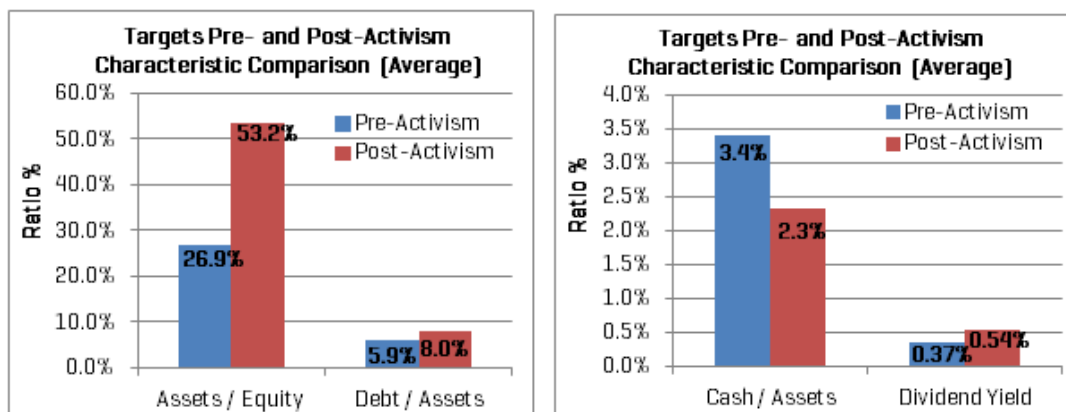
The results suggest that targets of activism during our sample period of analysis were small-capitalization, slow-growing and underperforming companies with low dividend yields and payouts in relation to their peers with comparable risk attributes. The firms, however, did not suffer from low margins or were they in financial distress in relation to their peers.

3. Post-Activism Characteristics of Targets

The next logical question is to examine the impact of activism on targets' financial characteristics. All financial measures used are adjusted for industry median to account for industry changes pre- and post-activism. The pre-activism measures use metrics 12-month prior to the event date and the post-activism measures use metrics 24-month after the event date. The results suggest that the targets' financial health did not improve post-activism up to two years afterwards. The results [see Figure 4] do appear to indicate that the targets had higher financial leverage, increased dividend yield, and lower cash holding [perhaps to finance the increase in the dividend yield]. The results suggest that activists may be able to unlock value by prompting management to return additional cash to shareholders and to lower their cost of capital via additional leverage to match the level of targets' risk-matched peers. See Exhibit 8 for tabular results of the average and median difference in the targets' characteristics pre- and post-activism.

Figure 4: Characteristics of Targets Pre- vs. Post-Activism

Russell 3000 Index, 2003 - 2012



Source S&P Capital IQ Quantamental Research
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Exhibit 8: Post-Activism Characteristics of Targets

Russell 3000 Index, 2003 – 2012

		col1	col2	col3	col4	col5	col6	col7
		Pre-Activism		Post-Activism		Post-Activism vs. Pre-activism		
Category	Measure	Average Characteristic of Targets	Median Characteristic of Targets	Average Characteristic of Targets	Median Characteristic of Targets	Difference in Average Characteristics of Targets	Difference in Median Characteristics of Targets	Count
Size	MktCap (\$MM)	570.2	-36.7	388.6	-145.6	-181.6	-108.8 **	294
Value	Book-to-Mkt	0.15	0.06	0.23	0.13	0.08 **	0.06	294
Growth	YoY Revenue Growth	0.5%	-2.6%	-1.7%	-2.7%	-2.2%	-0.1%	364
Efficiency	(NI + D&A) _t / Assets _{t-1}	0.3%	-0.2%	-2.8%	-0.8%	-3.0% ***	-0.7% ***	362
	Cash / Assets	3.4%	0.0%	2.3%	-0.3%	-1.1%	-0.3%	359
Margins	EBITDA _t / Assets _{t-1}	0.8%	0.0%	-1.7%	-1.8%	-2.5% ***	-1.8% **	325
	EBITDA / Revenue	1.7%	0.3%	-0.8%	-1.1%	-2.5% **	-1.4% ***	332
	NI / Revenue	-1.7%	-0.3%	-5.8%	-1.5%	-4.1% ***	-1.1% ***	370
Capital Structure	Assets / Equity	0.27	0.00	0.53	0.05	0.26 **	0.04	363
	Debt / (Debt + Equity)	5.9%	1.5%	8.0%	2.3%	2.1%	0.9%	374
Yield and Payout	Dividends / NI	7.8%	0.00%	6.5%	0.05%	-1.2%	0.05% *	370
	Dividend Yield	0.4%	0.00%	0.5%	0.00%	0.2%	0.00%	291

***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively

Source S&P Capital IQ Quantamental Research

Past performance is not a guarantee of future results

4. Data

This study uses Schedule 13D filing as our definition of the commencement of activism. The Schedule 13D filings are collected as the primary source of S&P Capital IQ’s investor activism data, which is a component of S&P Capital IQ Transactions data package. Holdings data from Form 13F are from S&P Capital IQ Ownership data package.

The universe for the study is defined as the Russell 3000 and covers the time period from January 2003 through the end of December 2012. The financial measures are based on S&P Capital IQ’s point-in-time (PIT) data and are winsorized at the 1% and 99% levels. Total returns are from S&P Capital IQ’s market data and are also winsorized at the 1% and 99% levels. The market, value, size, and momentum factor spreads used in section 1.2.1 Calendar-Time method are from S&P Capital IQ’s Alpha Factor Library (AFL), which contains 450+ stock selection signals with associated metrics such as information coefficients and factor spreads. All factor performance is downloadable by time period, regime, country, and sector dimensions.

5. Conclusion

The study appears to find that positive excess returns could be associated with taking equity positions in firms that have been targeted by activists even after controlling for market, size, value, momentum, and industry risk characteristics both in the short- and long-horizon. The excess returns are attributed to activism, after examining pre-disclosed positions of targets in the Form 13Fs prior to the Schedule 13D filings. In the sub-period 2008 – 2012, excess returns from activism had not diminished or had changed significantly vis-à-vis those from 2003 – 2007.

Our findings suggest that activists target firms that are generally small-capitalization, slow-growing, underperforming companies with low payouts and dividend yields but are not in financial distress. Post-activist involvement, we did not see evidence that targets' financials improved immediately. The targets' financial leverage and payout, however, did seem to increase suggesting that the activists are unlocking value by prompting management to return additional cash to shareholders and to lower their cost of capital via additional leverage to match the level of targets' risk-matched peers.

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Our Recent Research

February 2013: Stock Selection Model Performance Review: Assessing the Drivers of Performance in 2012

In this report, we review the performance of S&P Capital IQ's four U.S. stock selection models in 2012. These models were launched in January 2011, and this analysis will assess the underlying drivers of each model's performance over the 12 months ended December 31, 2012.

January 2013: Research Brief: Exploiting the January Effect Examining Variations in Trend Following Strategies

At the beginning of every year, one topic frequented by many institutional investors is the January Effect. Investors often point to January as the most pronounced example of seasonality, where longer term trend following strategies suddenly underperform and short-term reversal and mean-reversion dominate. But which strategies have performed well in January and is this performance sustainable? With several studies in the Literature documenting the January Effect on company capitalization, we decided to undertake our own review using our S&P Capital IQ Alpha Factor Library (AFL), to examine various strategies' effectiveness during the month.

December 2012: Do CEO and CFO Departures Matter? – The Signal Content of CEO and CFO Turnover

In October of this year, the US equity market was caught off guard with the seemingly sudden departure of Citibank CEO Vikram Pandit. While CEO departures are almost always headline news, CFO departures are not often accompanied with such recognition. We explore the impact of CEO and CFO departures and find consistent results in the US and the Developed World. CEO and CFO departures often signify a turning point in both the company's stock performance and the company's operating metrics.

November 2012: 11 Industries, 70 Alpha Signals –The Value of Industry-Specific Metrics

Investors routinely utilize industry intelligence in their investment process. But which information is relevant? Which is irrelevant? Our work yields some surprising results. This work complements our previous industry work on [Retail \[June 2011\]](#), [Banking \[Oct 2011\]](#), and [Oil & Gas \[May 2012\]](#). Using S&P Capital IQ's Global Point-in-Time database and Compustat Industry-Specific data, we look at 70 factors in 11 industries: airlines, hospitals & facilities, managed healthcare, pharmaceuticals & biotechnology, homebuilding, insurance, telecommunications, utilities, gold miners, hotels & gaming, and restaurants

October 2012: Introducing S&P Capital IQ's Fundamental Canada Equity Risk Models

In July 2012 we released our regional risk models -- the Pan-Asia ex. Japan and the Pan-European Models, and updated versions of our US and Global Risk Models. Continuing in our efforts to provide a broad set of models to the asset management community, we are now releasing our second single country risk model -- Canada Fundamental Equity Risk Model.

September 2012: Factor Insight: Earnings Announcement Return – Is A Return Based Surprise Superior to an Earnings Based Surprise?

In this report, we compare the performance of SUE to one based on returns around a firm's earnings announcement date [EAR], proposed by Brandt et al [2008]. We test both factors globally and find EAR dominates SUE in the U.S in the post Reg FD era on both a long-short return and top quintile excess return basis.

August 2012: Supply Chain Interactions Part 1: Industries Profiting from Lead-Lag Industry Relationships

Supply chain relationships are among the most visible and measurable, as revenues and costs shape the realized economic and financial performance of connected companies. Studies have shown that events within a supply chain do introduce these ripple effects, and theories incorporating this information into an investment process have garnered attention in recent years. We construct a map quantifying industry level connections along the supply chain. Using this map, and trailing industry returns as a proxy for industry level information shocks, we construct inter-industry momentum signals. These signals exhibit lead-lag relationships over short horizons, as the information shocks diffuse through the market and manifest themselves in the performance of related industries.

July 2012: Releasing S&P Capital IQ's Regional and Updated Global & US Equity Risk Models

Over the course of the last two years we released our Global and US Fundamental Equity Risk Models. As a natural progression we are releasing the first set of Regional Models – the Pan-Asia ex. Japan and the Pan-Europe Fundamental Equity Risk Models. This document will explain some of the salient aspects of the process adopted for constructing the Regional Models. We have also made additional improvements to our US & Global Equity Risk Models, and we shall explain these changes.

June 2012: Riding Industry Momentum – Enhancing the Residual Reversal Factor

Unlike individual stocks whose short-term returns tend to revert from one month to the next, industry portfolios exhibit return momentum even at a one-month horizon. We examine a strategy that takes advantage of both industry level momentum and stock level reversal. We combine our residual reversal factor with an industry momentum score, and find that the factor performance is greatly enhanced in the Russell 3000 universe between January 1987 and February 2012. The decile return spread is increased by 42 bps per month on average.

May 2012: The Oil & Gas Industry – Drilling for Alpha Using Global Point-in-Time Industry Data

In the oil & gas industry, a key determinant of value and future cash flow streams is the level of oil & gas reserves a firm holds. While most fundamental analysts/investors take into consideration a company's reserves in arriving at price targets, a majority of systematic driven processes do not. Using S&P Capital IQ's Global Point-in-Time database, we investigate the importance of reserve and production information provided by oil & gas companies.

May 2012: Case Study: S&P Capital IQ – The Platform for Investment Decisions

Ten years ago, AAPL traded just below \$12 and closed at \$583.98 on April 30, 2012. That is an average annual return of 48.1% over the period. During this same time the S&P 500 grew at an annual rate of only 2.65%. On April 2nd, Topeka Capital Markets initiated coverage of AAPL with a

price target of \$1001. If achieved, this would make AAPL the first company to ever reach a \$1 trillion market cap. In this case study, we highlight some key S&P Capital IQ functionality in analyzing AAPL hypothetically reaching \$1000:

March 2012: Exploring Alpha from the Securities Lending Market – New Alpha Stemming from Improved Data

Numerous studies have examined the information content of short interest and found that heavily shorted stocks tend to underperform and liquid stocks with low levels of short interest subsequently outperform. Most studies relied on short interest data obtained directly from the exchanges available with a significant delay.

January 2012: S&P Capital IQ Stock Selection Model Review – Understanding the Drivers of Performance in 2011

In this report, we review the performance of S&P CIQ's four U.S stock selection models in 2011. These models were launched in January 2011, and this analysis will assess the underlying drivers of each model's performance over the last 12 months.

January 2012: Intelligent Estimates – A Superior Model of Earnings Surprise

As residual stakeholders, equity investors place enormous importance on a company's earnings. Analysts regularly forecast companies' future earnings. The prospects for a company's future earnings then become the basis for the price an investor will pay for a company's shares. Market participants follow sell side analysts' forecasts closely, identifying those analysts that demonstrate forecasting prowess and track those analysts' forecasts going forward.

December 2011: Factor Insight – Residual Reversal

November 2011: Research Brief: Return Correlation and Dispersion – All or Nothing

October 2011: The Banking Industry

September 2011: Methods in Dynamic Weighting

September 2011: Research Brief: Return Correlation and Dispersion – Tough Times for Active Managers

July 2011: Research Brief – A Topical Digest of Investment Strategy Insights

June 2011: A Retail Industry Strategy: Does Industry Specific Data tell a different story?

May 2011: Introducing S&P Capital IQ's Global Fundamental Equity Risk Models

May 2011: Topical Papers That Caught Our Interest

April 2011: Can Dividend Policy Changes Yield Alpha?

April 2011: CQA Spring 2011 Conference Notes

March 2011: How Much Alpha is in Preliminary Data?

February 2011: Industry Insights – Biotechnology: FDA Approval Catalyst Strategy

January 2011: US Stock Selection Models Introduction

January 2011: Variations on Minimum Variance

January 2011: Interesting and Influential Papers We Read in 2010

November 2010: Is your Bank Under Stress? Introducing our Dynamic Bank Model

October 2010: Getting the Most from Point-in-Time Data

October 2010: Another Brick in the Wall: The Historic Failure of Price Momentum

July 2010: Introducing S&P Capital IQ's Fundamental US Equity Risk Model

FOLLOW THE SMART MONEY: RIDING THE COATTAILS OF ACTIVIST INVESTORS

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