2022

The Threat of Activist Intervention: A Determinant of 8-K Disclosure for Industrial Companies

Audrey Guilloteau

Claremont McKenna College

The Threat of Activist Intervention: A Determinant of 8-K Disclosure for Industrial Companies

submitted to

Professor Ben Gillen

by

Audrey Guilloteau

for

Senior Thesis

Fall 2021

December 6th, 2021

Abstract

In the face of an activist threat, management may be inclined to provide additional disclosure to discourage potential intervention. This paper constructs an empirical model to measure the threat of activism and voluntary disclosure using a data set of 92 industrials focused activist events from 2008 to 2019. Propensity score matching is used to identify close peer firms that experience a threat of activism at the time a campaign is announced. Results from a difference in differences analysis indicate that firms targeted by hedge fund activists provide additional disclosure in the two-year period following the campaign announcement, as seen through an increase in the number of 8-Ks filed and an increase in their associated word counts. As for the non-targeted peer firms, the results suggest that an increase in the perceived threat of activism leads management to file fewer 8-Ks after an intervention that are shorter in length, as well.

Contents

Introduction

July 2017 marked the start of "the largest boardroom battle in the history of director insurgencies" lead by hedge fund activist, Trian, against Proctor & Gamble (Herbst-Bayliss, 2017). At the start of this campaign, Trian had accumulated a stake of $3.5 billion which represented roughly 1.5% of the voting stock. Trian's multi-million dollar take-it-or-leave-it campaign focused on appointing their CEO, Nelson Peltz, to the board of P&G. However, this was no easy feat: P&G refused to cooperate on all accounts. In a press release, CEO David Taylor cautioned shareholders that Trian had a "history of hidden agendas that result in derailing companies" and wasting up to "25% of [other CEOs'] time answering his questions or debating misinformed ideas." Taylor and P&G would not fall victim next.

The fight, which "spared no resource and pulled every string of influence," forced P&G's management to pour over $100 million into campaign defense (Crawford, 2018). Trian, on the other hand, spent less than a quarter of that. After 18 months of relentless back-and-forth, Trian claimed victory in what was deemed to be the "largest proxy fight in history," claiming a seat for Nelson Peltz on P&G's Board of Directors (Crawford 2018). News of this agreement lead to significant share price appreciation a P&G's stock saw a "50% boost since before Peltz joined the board and gained 32% in 2019 alone" (Ponomareva 2018). While this may have appeased shareholders, one must not forget the public relations nightmare, extreme costs, and management distraction caused by Trian's tactics. In 2021, Nelson Peltz amicably relinquished his board member position stating that "Trian believes the company is well positioned for continued, future success."

And, as anticipated, in August of 2021, the Financial Times revealed that Unilever appears to be Trian's next target (Elder 2021). Inherently, this move makes sense for Trian as Unilever is one of P&G's closest comparables and direct competitors. It is possible Unilever is enticed by Trian's expertise, or perhaps they dread the negative associations of hedge fund activist campaigns. In any case, this series of events present the following question: Was there anything Unilever could have done to avoid being Trian's next intervention, or was it inevitable following the P&G campaign? Further, did the threat of activist intervention compel Unilever's management to act defensively in advance of the August 2021 article? This paper seeks to explore whether there is a response made by firms, such as Unilever, when their closest competitor is targeted by an activist firm.

Literature Review

I. Hedge Fund Activism

While companies have remained weary regarding the efficacy of hedge fund activists over the last decade, the motivation behind campaigns has seen a transformational shift. In the early 2010s, hedge fund activism gained traction through proxy contests as few firms had adequate poison pill infrastructure in place. When deployed properly, poison pills significantly dilute voting rights if investors cross a certain threshold of ownership stake in an investment. Prior to the mid-2010s, when this corporate governance tactic became common practice, activists were able to rapidly pile into positions and wage proxy wars to oust existing board members. According to Berg and Grossman (2019), the efficiency of this process made proxy wars the most successful activist strategy, with an average pass rate of 57.38% in 2011. However, due to rising costs and the wide-spread use

of poison pills in recent years, full-fledged proxy wars have become far less common. Lazard's 2020 Annual Review of Shareholder Activism illustrates that a mere 18% of proxy contest threats became proxy wars last year, and 82% of the Board seats activists secured came about via negotiated settlements.

With the new challenges associated to proxy wars, activists turned to M&A activity to unlock shareholder value. That said, many acquisitions and divestments fail to maximize shareholder value. According to Malcom (2019), 53% of buyers underperformed their industry benchmark in terms of total shareholder returns in the two years following their most recent acquisition. So, it is worth asking why activist hedge funds are deploying over 40% of total activist capital into these M&A driven pursuits (Lazard 2020). The answer can be traced to the simple idea of value creation. Surprisingly, most managers do not prioritize value creation in M&A transactions, but those who do outperform peers by 14% (PWC 2020). The role of hedge fund activists is to enhance returns along the value chain, and as such, these campaigns are specifically engineered to prioritize M&A value creation. Thus, it is no surprise that 73 M&A activist campaigns were initiated in 2020. Whether this and other forms of activism translate into company outperformance is highlighted in the subsequent discussion.

Significant literature suggests that hedge fund activists may help improve shareholder value (Allaire, 2015; Edmans, 2020; Denes et al., 2017; Brav et al., 2008). For example, Allaire's (2015) study of roughly 2,000 activist interventions finds a statistically significant improvement in operating performance of the target company in the five-years post-treatment. Even the most scrutinized and controversial forms of activism, such as

increasing leverage and employing hostile tactics, yield positive long-term effects. Edmans (2020) further concludes that activist hedge funds that have concentrated portfolios, access to resources, and aligned incentives are more likely to display 'engaged ownership' which in turn boosts shareholder value. Denes et al. (2017), determine that shareholder activism has become increasingly value accretive over time, suggesting that campaigns in the 1980s and 1990s had very few consequential effects relative to their present-day counterparts. In fact, it appears that the market even anticipates that hedge fund activism will improve value, as Brav et al. (2008) find positive abnormal returns associated with campaign announcements.

Despite clear empirical evidence of contributions to shareholder value, hedge fund activist interventions are often met with resistance. In fact, Johnson and Swem (2017) posit that the reputation an activist possesses is a key determinant in the target company's response to a campaign. The paper finds that management teams are much more likely to implement the changes proposed by a high reputation activist. The reason being, implementing changes and settling for the activist demands will reduce the risk of costly and time-consuming proxy fights. This trend holds true even in scenarios where the ownership stake is significantly smaller. However, even in high reputation scenarios, campaign objectives may be misaligned with management vision, which can breed intense tension and conflict between the two parties. It is possible that firm value maximization may be achieved in more than one way, with the target and the activist possessing differing views.

Furthermore, a growing body of literature concludes that not all activist-proposed corporate strategies produce successful outcomes (Coffee and Palia, 2014; Kuvandikov et al., 2021). It is probable that corporate executives running target firms have a better understanding of possible internal levers to maximize firm value than outsiders. Coffee and Palia (2014) substantiate this claim, critiquing the opportunistic nature and short-term focus of activist hedge fund investors. Kuvandikov et al. (2021) explore this assertation in the context of activist involvement in takeover scenarios where short termism is particularly prevalent. The paper indicates that activists may encourage M&A activity to benefit from takeover premiums while compromising long-term value in the post-merger integration environment.

Considering the evolution of activism and the dichotomy in contemporary literature, one can better understand management resistance towards campaigns of the sort. Once targeted, management teams are put at risk of job loss, board member turnover, and shifts in strategic vision. And to what end? The possibility of improved shareholder value, but far from guaranteed. With this degree of ambiguity, it is reasonable that managers take actions to deter hedge fund activists. In this paper, I examine whether management teams use voluntary disclosure as a mechanism to evade hedge fund activist intervention.

II. Activism and Voluntary Disclosure

A myriad of studies surrounding the topic of voluntary disclosure in firms targeted by shareholder activists was produced in the mid-2010s (Chen and Jung, 2015; Khurana et al., 2017). Cheng and Jung (2015) consider whether activist intervention influences a management team's tendency to release guidance. The paper finds that, on average, target

firms suspend or reduce the amount of guidance offered in the quarter after an activist takeover, even if they have consistently provided guidance in the past and display a successful track record. However, the motivations for suspending or reducing guidance are not fully explored by Chen and Jung (2015). Instead, this issue is taken up by Khurana et al. (2017). They also track voluntary disclosure in the form of management guidance and earnings management but focus on the quality of information. Khurana et al. (2017) use machine learning to distinguish between positive and negative disclosure announcements in 8-Ks. While Khurana et al. (2017) corroborate the findings of Chen and Jung (2015), the paper also concludes that managers are more likely to withhold information surrounding negative earnings guidance and more likely to increase the level of real earnings management in the post campaign period.

Other literature attempts to quantify the effect of voluntary disclosure in the case of specific activist strategies (Baginski et al., 2012; Baloria et al., 2019). Baginski et al. (2012) consider voluntary management disclosure in the context of proxy wars, which represented a significant fraction of activist campaigns at the time of the paper's publication. Because proxy contests are often associated with negative press, management teams increase guidance during the treatment period (proxy war) and decrease guidance in the post treatment period (post proxy war). The paper suggests that this voluntary increase in disclosure is to boost shareholder confidence in management control and to signal that poor past performance is temporary. Baginski et al. (2015) arrive at different results than Chen and Jung (2015) and Khurana et al. (2017) indicating that proxy war and ESG activism may actually encourage short term increases in company disclosure. This conclusion holds true in other areas of the activist investing universe. Baloria et al. (2019)

evaluates the impact of shareholder activist political spending proposals on ESG disclosures of the target companies. The paper determines that 20% of target companies increase their ESG disclosures in the year following the activist proposal whether the proposal is implemented or rescinded. This demonstrates the usefulness of shareholder activism in triggering increased voluntary disclosure among target firms in the context of ESG-related issues.

Thus, literature suggests that in the general sense, shareholder activism discourages voluntary disclosure from the target firm, but that there may be special cases wherein it is encouraged. One of these instances may be the case of a target firm's industry peers (Park et al., 2019; Bourveau and Schoenfeld, 2016). Park et al. (2019) examine voluntary disclosure in cases of partial common ownership, situations where a single investor own significant stakes in competing firms. Partial common ownership incentivizes companies to consider the consequences of their actions relative to peers in the common owner's portfolio, breeding competition that otherwise would not exist. The paper concludes partial common ownership incentivizes disclosure for the purpose of appeasing shareholders and encouraging lasting investment. While Park et al. (2019) does not specifically address shareholder activism, the paper demonstrates that companies issue disclosure to appear more attractive than their industry peers. The same logic can be applied to Bourveau and Schoenfeld (2016) who track the behavior of industry peers at the time one of their competitors faces an activist intervention. Bourveau and Schoenfeld (2016) determine that this threat of activism alone is enough to increase a non-target competitor's guidance by a statistically significant amount. My empirical study will most closely resemble the work

of Bourveau and Schoenfeld (2016) as I too intend to look at the threat of activism on management behavior of peer firms.

III. Contributions to Existing Literature

Existing literature on shareholder activism primarily explores voluntary disclosure through the lens of management guidance. Yet, there are several appropriate proxies to measure voluntary disclosure: management guidance, number of 8-Ks, 8-K word count, and items classified as voluntary across all financial filings (He and Plumlee, 2020). He and Plumlee (2020) explore the usefulness of these various proxies used to measure voluntary disclosure. These measures all appear to be highly correlated, but the paper finds that 8-K word count is the superior way to evaluate voluntary disclosure. He and Plumlee's' (2020) results suggest that previous literature surrounding activism and voluntary disclosure may not be measured using the most accurate outcome variable. The bulk of the literature on shareholder activism was published in the mid-2010s which explains this discrepancy. I will study voluntary disclosure in the scope of 8-K word count as well as filings count.

As discussed, a breadth of literature explores the implications of shareholder activism during the pre-poison pill era. Not only is this data just simply outdated, but it also no longer reflects the current hedge fund activist landscape. The objectives for activism have shifted, and it is possible that company response has, as well. I will be working with a new data set that incorporates the poison pill era of activism, consequently factoring in the impact of stronger takeover defenses. It is possible that these stronger

defenses will make management teams less worried about the threat of activism, and possibly less inclined to release additional disclosures.

While certain papers examined the implications specific strategic activist goals have on voluntary disclosure, there has yet to an empirical analysis the implications for specific industries. According to Lazard's Annual Review of Shareholder Activism, Industrials have been the most targeted sector for activism in four out of the last five years. So, this paper will explore how management teams in this industry respond to the threat of activist intervention. Lastly, I will look at how the effect of activist intervention affects disclosure over time. While much of the literature evaluates changes in disclosure over a two-year horizon, I also look at the changes in disclosure over a one-year horizon. This test reveals how firms respond to the activist threat over a shorter time horizon as well as a longer time horizon.

Data and Methodology

I. Propensity Score Matching

Activist campaigns in the Industrials sector are identified using Bloomberg Research. This database documents all hedge fund activist campaigns on companies listed on the two major U.S. exchanges. Bloomberg's categorization of hedge fund activist campaigns is not limited to 13-D documented events. When a hedge fund has the intention of engaging in activism, a 13-D must be filed when more than a 5% ownership stake is acquired. However, not all hedge funds acquire a 5% stake before intervening. To account for these smaller stake interventions, Bloomberg also identifies activist campaigns through Rule 14a-1 through four disclosures, 8-Ks, letters to shareholders, letters to boards, and

financial news sources. Bloomberg also provides supplemental information on the campaigns such as the campaign start date, activist objective, ownership stake size, and whether a 13-D was filed. As seen in Table 1, Panels A and B, 92 Industrials-focused campaigns have occurred since 2008 against firms situated in three primary subsectors: Materials, Industrial Products, and Industrial Services.

Then Bloomberg's activist campaign data is merged with corresponding financial data from CompuStat and S&P CapIQ. The same financial statistics are aggregated for an additional 777 firms, which make up the investable universe of Industrials companies that have not been targeted by hedge fund activists. As seen in Table 2, relevant Balance Sheet variables are adjusted to facilitate common size analysis. With these two clean data sets, activist-targeted firms can now be matched to similar non-target counterparts. This matching is achieved using propensity scores which map the set of highly dimensional $\boldsymbol{X}$ onto one scalar function (the propensity score) using a logit regression. This parametrizes the model such that each observation i with $D_i = 1$ is matched with another observation where $D_i = 0$ using the propensity score as the matching estimator:

$$\Pr(D_i = 1 \mid X_i) = \frac{e^{X_i'\gamma}}{1 + e^{X_i'\gamma}}$$

In the context of this study, the baseline characteristics, $\boldsymbol{X}$, used to generate the propensity scores of each firm are as follows: Log Total Assets, Log Market Cap, Market to Book, Cash, Debt Intangibles, Capex, R&D, Return on Assets, and Dividends per Share. Given that all the companies in this empirical study operate in the Industrials sector, operational similarity is implicit. Thus, the focus of the propensity score matching is to

align companies within the sector that display similar financial profiles, accounting for their size, asset base, and leverage. Table 3 provides the regression results obtained from the logit regression. After obtaining the propensity scores, the data is sorted by calendar year and peer firms are selected using nearest neighbor matching without replacement. More specifically, each activist targeted firm is matched with the non-targeted firm with the closest propensity score in the same year as the campaign. This propensity matched peer is then eliminated from the data set so that it cannot be matched with other campaigns. Matching ensures that the complete data set includes the treatment group of 92 activist targeted firms and the control group of 92 propensity matched peer firms.

As a preliminary robustness check, Table 4 reports the basic financial characteristics for the two samples of interest. I report the means for these samples along with the differences (and their standard errors). As expected, the difference in means for these baseline characteristics between the activist and non-activist targeted firms are generally well balanced. Apart from Capital Expenditures which is significant at the 10% level, we fail to reject the null for the baseline characteristics at any conventional levels. This suggest that there is little evidence of significant differences between the control and treatment groups adding to the integrity of the study.

II. Difference-in-Differences Analysis

For the secondary phase of data collection, management disclosure in the form of 8-Ks and 6-Ks (foreign issuer 8-K equivalents) were downloaded from the SEC Edgar database. For each activist-targeted firm and its matched peer, I obtain all 8-Ks released in the two years pre and post campaign quarter. This timing is based on Bourveau and

Schoenfeld's methodology for collecting guidance in their 2016 paper. In the complete sample of 184 treated and untreated firms, there are 183,416 8-K filings that meet the above criteria. After obtaining this raw data set, I use Python to pull the word count and filing date of each 8-K. As discussed in the literature review, the word count data represents the disclosure metric I will be using to generate the primary results in this study.

Given that the econometric model matches targeted firms with nearly identical non-target firms, it is highly likely that the peer firms experienced the threat of activism at the time their targeted counterpart experienced an intervention. In order to examine the effect that this threat has on the peer firm's disclosure, I rely on a difference-in-differences analysis. This model attempts to mimic random assignment with treatment and control samples. Furthermore, difference-in-differences research design controls for fixed effects, contemporary trends in disclosure, and the changes in disclosure of the activist-targeted firm. This model will refer to the propensity matched peers at the control group and activist intervention firms as the treatment group. This is in line with the propensity score matching estimation, where activist firms are denoted as the treated group. In this model, the control group experiences the threat of activism, while the treatment group experiences an activist intervention. The primary equation for the peer firms are as follows:

$$WC_{M;T=0} = \sum_{j=1}^{k} \beta_j Control_{j_{M;T=0}} + \tilde{\gamma}_{M;T=0} + \tilde{\theta}_{M,A;T=0} + \tilde{\varepsilon}_{M,E;T=0}$$

$$WC_{M;T=1} = \sum_{j=1}^{k} \beta_j Control_{j_{M;T=1}} + \tilde{\gamma}_{M;T=1} + \tilde{\theta}_{M,A;T=1} + \tilde{\varepsilon}_{M,E;T=1}$$

The dependent variable *WC*, represents my disclosure proxy, 8-K word count. The subscripts T = 0 and T = 1 represent the two-year pre-treatment period and two-year post treatment period, respectively. The model also accounts for time fixed effects denoted as $\tilde{\gamma}_{M;T=0,1}$ and unobservable time-varying effects, $\tilde{\theta}_{M,A;T=0,1}$. And, it is highly unlikely one-time varying factor will drive the results given that the sample contains nearly 13 years of data (from 2008 to 2021). To remove these fixed effects, the following equation takes the difference of equations I and II from above:

$$\Delta WC_M = a + \sum_{j=1}^{k} \beta_j \Delta Control_{jM} + \tilde{\varepsilon}_M$$

This effectively eliminates the firm fixed effects, and controls for other baseline characteristics that may influence disclosure. These additional covariates include Log Total Assets, Log Market Cap, Market to Book, Cash, Debt Intangibles, Capex, R&D, Return on Assets, and Dividends per Share. The coefficient, β_j, illustrates the effect of an activist-targeted firm's change in disclosure upon intervention. And, the resulting intercept, a, illustrates the effect of a non-targeted firm's change in disclosure as the result of intensifying activist threat. In other words, the difference-in-differences analysis isolates the causal effect the threat of activism has on a non-targeted firm's voluntary disclosure wherein all other remaining unsystematic risk is captured by the error term, $\tilde{\varepsilon}_M$.

Thus, the model above can be used to generate the following regression specification:

$$\Delta \ln WC_{ijt} = \delta_0 + \delta_1 Activist\ Event_{ij} + a_t + \omega_{ijt}$$

Where $\Delta \ln WC_{ijt}$ is the natural logarithm of 8-K word count for treatment firm *i* of pair *j*, $Activist\ Event_{ij}$ is a binary variable denoting whether the company faced an activist intervention, and a_t are the time fixed effects common to the firm pair. Because activist intervention may be correlated with time related trends, I include these fixed effects to ensure that δ_1 is unbiased. Baseline characteristics are incorporated into the model as additional controls. In this regression, δ_0 reports the average change in disclosure for peer firms that are considered to be under the threat of activism, and δ_1 represents how activist-targeted firm disclosure differs from the peer group. Thus, the sum of δ_0 and δ_1 represents the net effect an activist intervention has on voluntary disclosure.

Discussion and Results

I. Main Results: Word Count

Management response to threat of activist intervention is unclear *ex ante*. Managers of peer companies that have not yet been targeted may be inclined to provide additional disclosure as a show of good faith to shareholders and activists (e.g., Bourveau and Schoenfeld, 2016; Park et al., 2019). In contrast, managers might also suspend or reduce guidance in hopes of remaining unnoticed or as a way to hide unfavorable results (e.g., Chen and Jung, 2015; Khurana et al., 2017).

Table 5 reports the effect of activist threat on voluntary disclosure, measured using the natural logarithm of 8-K word count, *DeltaWC(ln)* over the two years pre and post campaign start. In Columns (1) and (2), the results are reported without the inclusion of fixed effects; in Columns (3) and (4), year and year-quarter time fixed effects are included, respectively. Baseline characteristics are included as additional controls in Columns (2),

(3), and (4). The inclusion of additional covariates and fixed effects significantly increases the *R-squared*. These results make sense as they allow the model to explain the commonality between the peer control firms and the targeted treatment firms. The coefficient on *ActivistEvent* represents the effect an intervention has on a targeted firm's disclosure, while the intercept represents the effect an intervention has on a peer firm's disclosure.

The results indicate that the threat of activism on control peer firms is mixed and not highly statistically significant. Column (3), which includes year fixed effects and baseline covariates, is statistically significant at the 10% level. This model suggests that the threat of activism on a peer firm leads to a decrease in 8-K disclosure by 95.4% in the two years following the campaign announcement. However, when the quarter fixed effects are incorporated in Column (4), the effect is positive and no longer statistically significant. And while the coefficient .710 is economically large in this model, the reported standard error of .424 is also quite large. However, the Year Fixed Effects Model is the most informative and best fitting regression given the high *R-Squared* relative to the number of variables included. These primary results contradict the findings of Bourveau and Schoenfeld (2016), as the threat of activism decreases disclosure provided in 8-K filings, perhaps attributable to this study's focus on industrials companies.

In contrast to the peer firms, the results suggest that activist intervention has a positive effect on 8-K word count of targeted firms in the two years post campaign start date. Relative to the Simple Difference in Column (1), the estimated effect is larger and the statistical significance is stronger in the second and third columns where I include

covariates and year fixed effects. In Column (3), the activist intervention leads to a 59.1% increase in 8-K word count from the two years pre campaign to the two years post. I can conclude that the effect of activist intervention on 8-K word count is statistically significant at the 5% level, despite a somewhat large standard error.

When quarter fixed effects are included in Column (4), the estimated effect, while still positive, decreases and the model is no longer statistically significant at conventional levels. Once again, the Year Fixed Effects Model is the most informative and best fitting regression given the high *R-Squared* relative to the number of variables included. These findings differ from previous literature published by Chen and Jung (2015) as activist campaigns appear to increase disclosure provided in 8-K filings over the two-year time horizon post intervention.

II. Robustness

II.1. Time Horizon

In an attempt to further validate these findings, I perform several robustness checks beginning with narrowing the time horizon over which the change in 8-K word count is observed. Table 6 highlights the one-year pre and post regression outcomes with Simple Difference in Column (1), Including Effect of Controls in Colum (2), Year Fixed Effects in Column (3), and Year-Quarter Fixed Effects in Colum (4).

In the case of the control peer firms, the statistical significance of Column (3) is much weaker than in Table 5, but Columns (1) and (4) are highly statistically significant (at the 1% level). This illustrates the importance of including covariates and year-quarter fixed effects in the model as the fit improves significantly. Both models provide evidence

that the threat of activism increases 8-K word count disclosure in the period shortly following the campaign announcement. This suggests that peer firms in the industrials space provide additional disclosure in the year immediately following an intervention on their closest comparable. Column (4), which includes quarter fixed effects and baseline controls, suggests that peer firms see a word count increase of 163% when faced with the threat of activism. As such, these shorter horizon findings corroborate Bourveau and Schoenfeld's (2016) paper.

While the statistical significance of the target firm results in Columns (1) through (3) is much weaker than that of Table 5, surprisingly there is a negative effect on disclosure in this shorter period. Columns (2) and (4) yield statistically significant results where we can reject the null of no change to filing count at the 10% level. More specifically, the results from Column (4) suggest that activist intervention leads to a -91.1% change in 8-K word count. In contrast to the two-year post campaign period, these results paint an interesting picture of management disclosure for industrials companies facing activist campaigns. In other words, these results are more in line with Chen and Jung (2015) and Khurana et al. (2017).

Between Tables 5 and 6, I can conclude that the threat of activism may cause peer firms to release additional disclosure at the outset. However, over a longer horizon, disclosure drops off and the effect appears to become increasingly negative relative to the pre-event environment. While this study does not empirically attempt to determine the cause of this trend, it is possible that the perceived threat of activism is higher right after a campaign is announced as hedge funds are known for their short-term agendas.

Management may believe that the activist is more likely to immediately initiate a second campaign. However, as the campaign matures, the perceived threat of activism decreases as the activist becomes closer to exiting the position and pursuing a new intervention in a different industry. Thus, the positive results observed in Table 6 could indicate that management provides more disclosure in the shorter horizon as a defensive measure. And, the negative results observed in Table 5 could indicate management sees less need to provide additional disclosure in the longer horizon as the threat dissipates.

Further, I can conclude that managers at firms targeted by activists become more hesitant to release additional guidance when they are initially under attack. However, over a longer horizon, the amount of guidance provided increases relative to the pre-event environment. This directly contrasts with the actions of the peer firm, and thus a couple alternative scenarios could help explain the motivations of managers facing a campaign:

1. It is possible the initial shock and uncertainty surrounding a recent campaign announcement makes management more reluctant to provide additional disclosure in the one-year post. However, as more information surrounding the campaign becomes available, management becomes more inclined to provide additional disclosure.
2. It is also possible that the initial decrease in disclosure is met with an increase in demand for disclosure from existing shareholders or the activist fund. This may lead to an overcorrection in disclosure provided by management as illustrated by the positive results seen in Table 5.

However, a clear limitation of this paper is that it does not determine which of these above effects drives the results depicted in Tables 5 and 6. Furthermore, this paper does not distinguish whether the additional disclosure is material to investors.

II.2. Filings Count

I perform a secondary robustness check by evaluating an alternative proxy for disclosure: the number of 8-Ks filed. As discussed in He and Plumlee (2020), this is an additional appropriate measure for voluntary disclosure. Now the model can be written as:

$$\Delta \ln Count_{ijt} = \delta_0 + \delta_1 Activist\ Event_{ij} + a_t + \omega_{ijt}$$

Where $\Delta \ln Count_{ijt}$ is the natural logarithm of 8-K filing count for treatment firm *i* of pair *j*, $Activist\ Event_{ij}$ is a binary variable denoting whether the company faced an activist intervention, and a_t are the time fixed effects common to the firm pair. Because activist intervention may be correlated with time related trends, I once again include these fixed effects to ensure that δ_1 is unbiased.

The above regression is then estimated using OLS and Table 7 reflects the results over the two-years pre and post event horizon. Columns (1) through (4) support the statistically significant findings in Table 5 as the threat of activism also leads to a decrease in control firm filings count over the two-year time horizon. Both the Simple Difference and Year Fixed effects models are statistically significant and negative for the peer firms at the 10% level. For the Year Fixed-Effects model, there appears to be a 40.4% decrease in the number of 8-Ks filed in the post event period. This statistically significant drop reinforces the view that managers of peer firms in the industrials space are less likely to offer additional disclosure in the two-year period following an intervention of their closest

competitor. Thus, these results, in combination with Table 5 suggest that peer firms not only file fewer 8-Ks after an intervention, but they are shorter, as well.

Columns (1) through (4) also reveal that the effect on the targeted firms' number of 8-Ks filed is positive and highly statistically significant. This supports the findings from Table 5, as there appears to be a clear increase in voluntary disclosure in the two years post campaign start. For instance, when an activist is present, the number of 8-K filings increases by 91.6% as seen in Column (4). The inclusion of covariates, year fixed effects and quarter fixed effects, brings the *R-Squared* to .482 in Column (4), while maintaining significance at the 5% level. As such, in the context of this study of industrials companies, measuring voluntary disclosure through of 8-K filing count is quite robust. These findings, combined with those from Table 5 suggest that not only are there more filings released in the two years post campaign, but they are longer, as well.

For both the control and treatment groups the effects over the longer time horizon are well defined, but they are less clear for in the one-year pre and post model. As seen in Table 8, there is no evidence of statistical significance in any of the four regressions. Furthermore, the results do not appear to be economically significant due to the large standard errors associated with the estimates. It is also worth noting that the inclusion of covariates and year fixed effects causes the coefficients to become quite small. However, the trend that appears between the differing time horizons in Tables 7 and 8 could be explained with the same reasons as Tables 5 and 6. In a general sense, the results and robustness checks point to a clear trend of decreasing voluntary disclosure in the longer

time horizon as attributable to the perceived threat of activism for peer firms, and the inverse for targeted firms.

III. Net Effect Results

When combined, the coefficients for *ActivistEvent* and *Constant* represent the net effect an activist intervention has on the disclosure for the control and treatment groups. Table 9 reports the linear combination of these two variables for both disclosure proxies and time horizons of interest. In Panel A, the net effect of activist intervention on word count disclosure in the two years post is positive and statistically significant in Columns (1) and (2). However, this effect seems to be absorbed when the year and quarter fixed effects are incorporated in Columns (3) and (4) which are not statistically significant. Furthermore, as seen in Panel B, the net effect in the one-year horizon is not statistically significant at any level, and the coefficients are relatively small with large standard errors.

That said, the net effect of hedge fund activism on filings count in Panel C does appear to be positive and statistically significant over the two-year horizon. When controls are incorporated in Column (2), the number of filings increases by 37.8% with a significance at the 5% level. When quarter fixed effects are also integrated in Column (4), the coefficient is smaller and significance is weaker, but still represents a 29.2% increase in filings at the 10% level. However, the net effect remains less clear in the shorter time horizon as seen in Panel D. Here, there is only statistical significance in the simple differences model at the 10% level, but the coefficient is relatively small. And, when additional variables are incorporated, the outcome is no longer statistically significant, and the coefficients remain economically insignificant.

Taken together, these findings suggest that activist interventions have an overwhelmingly positive net effect on voluntary disclosure over a longer time horizon. As seen through Panels A and C, both 8-K word count and the number of files released increases. However, the net effect for the shorter horizon remains less clear, as there does not appear to be a significant increase or decrease in voluntary disclosure in the one-year post campaign. Thus, I can conclude that hedge fund activism does indeed materially influence voluntary disclosure following a campaign, but the effect may not be immediate.

Conclusion

A large and growing body of literature has illustrated that management behavior changes in light of an activist campaign. In this study, I have asked whether the threat of activism also affects voluntary disclosure for companies operating in the industrials space. I find this to indeed be the case, as there are empirical differences between the amount of disclosure, with respect to 8-K word count, provided by management in the time periods before and after a campaign is announced. This paper also examines the number of 8-Ks filed, another commonly used proxy for voluntary disclosure. Once again, controlling for time fixed effects, the results indicate a material change in the amount of disclosure provided, particularly over a longer time horizon.

These findings contribute to the understanding of how hedge fund activists impact both target and non-target companies, in the scope of a specific industry. Further, the highly significant results suggest that word count and number of filings are robust measures of voluntary disclosure. And, while other studies look at a broad set of industries, these outcomes provide novel evidence of changes in management behavior for companies in

the industrials sector. Finally, with the use of an updated set of data, these results continue to support the findings of papers published earlier in the decade, suggesting that while activist strategies have fundamentally changed, defensive responses remain the same.

Further research may focus on voluntary disclosure in other industries, such as Financial Institutions and Technology, that consistently face large volumes of hedge fund activist activity. Several studies have also emphasized the importance of specialized cases of intervention, such as proxy wars or ESG initiatives, (e.g., Baginski et al., 2012; Baloria et al., 2019), which provides another direction for additional research. Additionally, the results published in this paper could be further refined to consider the impacts within the subsectors of industrials: materials, industrial products, and industrial services.

Table 1: Distribution of Activist Campaigns by Year and Subsector

Panel A: Distribution of Activist Campagins by Year

Year	Number of Campaigns
2008	1
2009	0
2010	4
2011	2
2012	8
2013	6
2014	10
2015	8
2016	10
2017	13
2018	16
2019	14
Total	92

Panel B: Distribution of Activist Campaigns by Subsector

Year	Number of Campaigns
Materials	24
Industrial Products	38
Industrial Services	30
Total	92

Table 2: Variable Definitions

Variable	Definition
Log Market Cap	Log of (Price at Close * Diluted Shares Outstanding)
Log Total Assets	Log of Total Assets
Market to Book	Market Cap / (Total Assets - Accumulated Depreciation)
Cash	Cash / Total Assets
Debt	(Long Term Debt + Debt in Current Liabilties) / Total Assets
Intangibles	Intangibles / Total Assets
Capital Expenditures	Capital Expenditures / Total Assets
Research & Development	R&D / Total Assets
Return on Assets	Net Income / Total Assets
Dividends per Share	1 if firm paid dividend in quarter of interest, 0 otherwise

Table 3: Logit Regression Results for Propensity Score Matching

Variable (N = 22,364)	Coefficent	Stanard Error	Z-score	P-value	[95% Confidence Interval]	
Log Market Cap	0.42	0.13	3.16	0.00	0.16	0.68
Log Total Assets	-0.30	0.13	-2.24	0.03	-0.56	-0.04
Market to Book	0.00	0.02	-0.05	0.96	-0.05	0.04
Cash	-1.08	1.02	-1.06	0.29	-3.09	0.93
Debt	0.12	0.20	0.60	0.55	-0.27	0.50
Intangibles	-1.53	0.56	-2.75	0.01	-2.61	-0.44
Capital Expenditures	8.91	3.65	2.44	0.02	1.76	16.06
Research & Developmen	-11.09	12.28	-0.90	0.37	-35.16	12.98
Return on Assets	0.00	0.16	-0.03	0.98	-0.32	0.31
Dividends per Share	-0.30	0.23	-1.31	0.19	-0.75	0.15
Constant	-5.62	0.44	-12.88	0.00	-6.47	-4.76

Table 4: Descriptive Statistics of Activist Targeted Firms and Treatment Firms

All Balance Sheet line items are scaled by Total Assets, except for Log Total Assets. The variables reported in Panel A reflect the financial status of the firm in the quarter of the campaign start date. The Subscript *A* indicates an activism firm while the subscript *M* indicates a matched peer firm.

Panel A: Activism Firms

Variable (N=92)	Average	St. Dev	25th Perc.	Median	75th Perc.
Log Market Cap$_A$	7.08	2.34	4.85	7.14	8.74
Log Total Assets$_A$	6.96	2.30	5.60	7.13	8.28
Market to Book$_A$	1.63	2.22	0.58	1.01	1.99
Cash$_A$	0.10	0.11	0.02	0.06	0.15
Debt$_A$	0.23	0.18	0.07	0.24	0.35
Intangibles$_A$	0.20	0.18	0.01	0.17	0.36
Capital Expenditures$_A$	-0.01	0.01	-0.01	-0.01	0.00
Research & Development$_A$	0.00	0.01	0.00	0.00	0.00
Return on Assets$_A$	0.00	0.05	-0.01	0.01	0.02
Dividends per Share$_A$	0.13	0.27	0.00	0.00	0.15

Panel B: Propensity Matched Peer Firms

Variable (N=92)	Average	St. Dev	25th Perc.	Median	75th Perc.
Log Market Cap$_M$	7.18	2.16	6.01	7.29	8.65
Log Total Assets$_M$	7.09	2.23	5.64	7.14	8.33
Market to Book$_M$	1.34	1.20	0.50	0.91	1.59
Cash$_M$	0.08	0.09	0.02	0.05	0.10
Debt$_M$	0.22	0.23	0.00	0.17	0.35
Intangibles$_M$	0.20	0.21	0.02	0.12	0.34
Capital Expenditures$_M$	-0.01	0.01	-0.02	-0.01	0.00
Research & Development$_M$	0.00	0.01	0.00	0.00	0.00
Return on Assets$_M$	0.01	0.06	0.01	0.01	0.02
Dividends per Share$_M$	0.13	0.24	0.00	0.00	0.16

Panel C: Difference in Means of Baseline Characteristics

	Activist Target	Matched Peer	Difference	P-value
Log Market Cap	7.083	7.180	0.097	0.770
			(0.331)	
Log Total Assets	6.955	7.086	0.130	0.695
			(0.332)	
Market to Book	1.630	1.335	-0.295	0.260
			(0.261)	
Cash	0.102	0.078	-0.024	0.111
			(0.015)	
Debt	0.235	0.219	-0.016	0.604
			(0.030)	
Intangibles	0.196	0.197	0.001	0.972
			(0.029)	
Capital Expenditures	-0.008	-0.012	-0.004	0.068*
			(0.002)	
Research & Development	0.002	0.003	0.001	0.435
			(0.001)	
Return on Assets	0.000	0.009	0.009	0.238
			(0.008)	
Dividends per Share	0.126	0.129	0.003	0.942
			(0.037)	

Table 5: Difference in Differences for Word Count Two Years Pre and Post Event

This table reports the regression of the control and treatment firms' change in 8-K word count on contemporaneous changes in firm characteristics. The pre period is [-2 years, 0), and the post period is [0, +2 years], where day 0 is the announcement date of the activist investor campaign.

Variables	(1) Simple Difference	(2) Controls	(3) Year FE	(4) Year-Quarter FE
Activist Event	0.519*	0.545**	0.591**	0.0984
	(0.263)	(0.260)	(0.284)	(0.424)
Constant	-0.304	0.389	-0.954*	0.710
	(0.248)	(0.429)	(0.520)	(0.455)
Log Market Cap		0.160	0.186	0.188
		(0.104)	(0.131)	(0.154)
Log Total Assets		-0.216*	-0.258*	-0.187
		(0.117)	(0.138)	(0.192)
Market to Book		-0.0478	-0.0527	-0.0125
		(0.0527)	(0.0557)	(0.0760)
Cash		-1.463*	-1.999**	-1.577
		(0.759)	(0.780)	(1.087)
Debt		-1.173***	-1.071**	-1.165*
		(0.440)	(0.453)	(0.638)
Intangibles		0.189	0.181	-0.189
		(0.540)	(0.625)	(0.738)
Capex		-2.817	-1.655	-2.524
		(5.738)	(6.286)	(9.266)
Research & Development		9.921	2.025	-0.112
		(16.12)	(17.86)	(16.77)
Return on Assets		-0.137	-1.716	-1.948
		(3.261)	(3.091)	(3.772)
Dividend per Share		0.173	0.301	0.103
		(0.195)	(0.184)	(0.276)
Year Fixed Effects	N	N	Y	N
Year-Quarter Fixed Effects	N	N	N	Y
Observations	92	92	92	92
R-squared	0.021	0.143	0.241	0.309

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 6: Difference in Differences for Word Count One Year Pre and Post Event

This table reports the regression of the control and treatment firms' change in 8-K word count on contemporaneous changes in firm characteristics. The pre period is [-1 year, 0), and the post period is [0, +1 year], where day 0 is the announcement date of the activist investor campaign.

Variables	(1) Simple Difference	(2) Controls	(3) Year FE	(4) Year-Quarter FE
Activist Event	-0.153	-0.392*	-0.456	-0.911*
	(0.125)	(0.220)	(0.295)	(0.501)
Constant	0.211***	0.428	-0.130	1.613***
	(0.0713)	(0.438)	(0.576)	(0.536)
Log Market Cap		0.0180	0.111	0.0976
		(0.112)	(0.128)	(0.177)
Log Total Assets		-0.0352	-0.142	-0.0466
		(0.130)	(0.138)	(0.211)
Market to Book		0.0317	0.00947	0.0347
		(0.0579)	(0.0598)	(0.0808)
Cash		-1.238	-2.042*	-1.363
		(0.963)	(1.110)	(1.103)
Debt		-0.724	-0.781	-0.882
		(0.646)	(0.738)	(0.753)
Intangibles		0.614	0.605	0.238
		(0.611)	(0.715)	(0.862)
Capex		-0.266	0.0609	-2.045
		(6.388)	(7.720)	(9.849)
Research & Development		49.32**	38.97*	52.00**
		(20.16)	(21.55)	(22.89)
Return on Assets		-2.096	-3.408	-4.441
		(3.753)	(3.801)	(3.928)
Dividend per Share		0.348	0.462**	0.143
		(0.240)	(0.228)	(0.296)
Year Fixed Effects	N	N	Y	N
Year-Quarter Fixed Effects	N	N	N	Y
Observations	92	92	92	92
R-squared	0.001	0.161	0.264	0.381

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 7: Difference in Differences for Filings Count Two Years Pre and Post Event

This table reports the regression of the control and treatment firms' change in number of 8-Ks filed on contemporaneous changes in firm characteristics. The pre period is [-2 years, 0), and the post period is [0, +2 years], where day 0 is the announcement date of the activist investor campaign.

Variables	(1) Simple Difference	(2) Controls	(3) Year FE	(4) Year-Quarter FE
Activist Event	0.417***	0.425***	0.429***	0.916**
	(0.118)	(0.152)	(0.126)	(0.367)
Constant	-0.304*	-0.0468	-0.404*	-0.625
	(0.161)	(0.224)	(0.210)	(0.422)
Log Market Cap		0.0110	0.0379	0.0107
		(0.0741)	(0.0733)	(0.0728)
Log Total Assets		-0.0424	-0.0716	-0.0433
		(0.0798)	(0.0775)	(0.0772)
Market to Book		-0.0275	-0.0282	-0.0227
		(0.0281)	(0.0283)	(0.0354)
Cash		-0.355	-0.581	-0.0324
		(0.340)	(0.362)	(0.368)
Debt		-0.443	-0.449	-0.221
		(0.292)	(0.276)	(0.321)
Intangibles		0.322	0.296	0.401
		(0.223)	(0.220)	(0.324)
Capex		-4.137	-2.605	-4.824
		(3.386)	(3.303)	(3.205)
Research & Development		8.187	5.637	10.38
		(9.685)	(8.777)	(11.01)
Return on Assets		0.129	-0.606	-0.0402
		(1.246)	(1.057)	(1.310)
Dividend per Share		0.0458	0.0716	0.0882
		(0.107)	(0.103)	(0.127)
Year Fixed Effects	N	N	Y	N
Year-Quarter Fixed Effects	N	N	N	Y
Observations	92	92	92	92
R-squared	0.064	0.148	0.285	0.482

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 8: Difference in Differences for Filings Count One Year Pre and Post Event

This table reports the regression of the control and treatment firms' change in number of 8-Ks filed on contemporaneous changes in firm characteristics. The pre period is [-1 year, 0), and the post period is [0, +1 year], where day 0 is the announcement date of the activist investor campaign.

Variables	(1) Simple Difference	(2) Controls	(3) Year FE	(4) Year-Quarter FE
Activist Event	0.163	0.0565	-0.0442	0.396
	(0.150)	(0.175)	(0.147)	(0.376)
Constant	-0.0839	-0.0782	0.0795	-0.599
	(0.195)	(0.271)	(0.268)	(0.415)
Log Market Cap		0.0230	0.0776	0.000685
		(0.0753)	(0.0805)	(0.0857)
Log Total Assets		-0.0246	-0.0811	-0.0167
		(0.0847)	(0.0856)	(0.103)
Market to Book		-0.0232	-0.0314	0.00361
		(0.0331)	(0.0316)	(0.0451)
Cash		-0.130	-0.442	-0.145
		(0.317)	(0.363)	(0.416)
Debt		-0.223	-0.253	-0.121
		(0.320)	(0.332)	(0.399)
Intangibles		0.571**	0.517*	0.625
		(0.259)	(0.275)	(0.423)
Capex		-2.997	-1.718	-4.970
		(3.537)	(3.922)	(4.376)
Research & Development		22.97**	19.65**	24.16**
		(9.354)	(9.207)	(11.31)
Return on Assets		-0.166	-1.098	-1.211
		(1.700)	(1.496)	(2.017)
Dividend per Share		0.0560	0.0958	0.102
		(0.128)	(0.122)	(0.162)
Year Fixed Effects	N	N	Y	N
Year-Quarter Fixed Effects	N	N	N	Y
Observations	92	92	92	92
R-squared	0.007	0.143	0.288	0.386

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 9: Net Effect of Activist Intervention

This table reports the point estimates, standard errors, and significance for the linear combination of the coefficients for control and treatment firms' change in in disclosure. This represents the net effect of activist intervention on change in disclosure.

Panel A: Word Count Two Years Pre and Post Event

	(1)	(2)	(3)	(4)
	Simple Difference	Controls	Year FE	Year-Quarter FE
Net Effect	0.215**	0.934**	-0.363	0.809
	(0.086)	(0.430)	(0.513)	(0.532)

Panel B: Word Count One Year Pre and Post Event

	(1)	(2)	(3)	(4)
	Simple Difference	Controls	Year FE	Year-Quarter FE
Net Effect	0.058	0.036	-0.586	0.702
	(0.103)	(0.472)	(0.605)	(0.578)

Panel C: Filing Count Two Years Pre and Post Event

	(1)	(2)	(3)	(4)
	Simple Difference	Controls	Year FE	Year-Quarter FE
Net Effect	0.112***	0.378**	0.025	0.292*
	(0.038)	(0.164)	(0.178)	(0.162)

Panel D: Filing Count One Year Pre and Post Event

	(1)	(2)	(3)	(4)
	Simple Difference	Controls	Year FE	Year-Quarter FE
Net Effect	0.079*	-0.022	0.035	-0.203
	(0.046)	(0.218)	(0.250)	(0.218)

Standard errors in parentheses

*** p<0.01, **p<0.05, *p<0.1

References

Allaire, Yvan. “The Case for and against Activist Hedge Funds.” *Institute for Governance of Private and Public Organizations (IGOPP),* 2015, doi:10.2139/ssrn.2613154.

Baginski, Stephen P., et al. “Forward-Looking Voluntary Disclosure in Proxy Contests.” *Contemporary Accounting Research,* 2012, doi:10.2139/ssrn.2295997.

Baloria, Vishal P., et al. “Shareholder Activism and Voluntary Disclosure Initiation: The Case of Political Spending.” *Contemporary Accounting Research*, vol. 36, no. 2, 2019, pp. 904–933., doi:10.1111/1911-3846.12457.

Berg, Alexander, and Richard Grossman. “Recent Trends in Shareholder Activism.” *The Harvard Law School Forum on Corporate Governance*, 11 Oct. 2019, corpgov.law.harvard.edu/2019/10/11/recent-trends-in-shareholder-activism/.

Bourveau, Thomas, and Jordan Schoenfeld. “Shareholder Activism and Voluntary Disclosure.” *Review of Accounting Studies,* 2016, doi:10.2139/ssrn.2668304.

Chen, Jing, and Michael J. Jung. “Activist Hedge Funds and Firm Disclosure.” *Review of Financial Economics,* vol. 29, 2016, pp. 52–63., doi:10.1016/j.rfe.2015.09.004.

Coffee, John C., and Darius Palia. “The Impact of Hedge Fund Activism: Evidence and Implications.” *European Corporate Governance Institute,* 2014, doi:10.2139/ssrn.2496518.

Crawford, Aneliya, et al. “Lessons Learned from Trian's Campaign at Procter & Gamble.” *The Harvard Law School Forum on Corporate Governance*, 25 Mar. 2018, corpgov.law.harvard.edu/2018/03/25/lessons-learned-from-trians-campaign-at-procter-gamble/.

Denes, Matthew, et al. “Thirty Years of Shareholder Activism: A Survey of Empirical Research.” *Journal of Corporate Finance*, 2015, doi:10.2139/ssrn.2608085.

Edmans, Alex. “Does Shareholder Activism Split the Pie or Grow the Pie?” *The Harvard Law School Forum on Corporate Governance*, 15 Oct. 2020, corpgov.law.harvard.edu/2020/10/15/does-shareholder-activism-split-the-pie-or-grow-the-pie/.

Elder, Bryce. “Unilever Tipped as Prime Target for Activist Peltz.” *Financial Times*, 13 Aug. 2021, https://www.ft.com/content/77ee6bd4-95e4-4d63-88f3-994049058291.

He, Jing, and Marlene A. Plumlee. “Measuring Disclosure Using 8-k Filings.” *Journal of Accounting and Economics*, 2019, doi:10.2139/ssrn.3354252.

Herbst-Bayliss, Svea. “Trian and P&G Highlight Activist-Corporate Collaboration after 'Fog of War'.” *Reuters*, Thomson Reuters, 19 Sep. 2019, www.reuters.com/article/us-deliveringalpha-trian-p-g/trian-and-pg-highlight-activist-corporate-collaboration-after-fog-of-war-idUSKBN1W42W8.

Johnson, Travis L., and Nathan Swem. “Reputation and Investor Activism: A Structural Approach.” *Journal of Financial Economics*, 2019, doi:10.2139/ssrn.3347501.

Khurana, Inder K., et al. “The Effects of Hedge Fund Interventions on Strategic Firm Behavior.” *Management Science*, vol. 64, no. 9, 2018, pp. 4094–4117., doi:10.1287/mnsc.2017.2816.

Kuvandikov, Azimjon, et al. “Activist Hedge Funds and Takeovers: Their Effects on Employment and Performance.” *British Journal of Management*, 2021, doi:10.1111/1467-8551.12507.

Lloyd, Malcolm. “Creating Value beyond the Deal.” *PWC M&A Report,* 2019.

Park, Jihwon, et al. “Disclosure Incentives When Competing Firms Have Common Ownership.” *Journal of Accounting and Economics*, 2018, doi:10.2139/ssrn.3271940.

Peltz, Nelson. “Procter & Gamble Says Trian’s Peltz to Retire From Board” *Bloomberg Terminal News,* 15 Aug 2021.

Ponomareva, Yuliya. “Shareholder Activism Is On The Rise: Caution Required.” *Forbes*, Forbes Magazine, 11 Dec. 2018, www.forbes.com/sites/esade/2018/12/10/shareholder-activism-is-on-the-rise-caution-required/#3ab8482d4844.

Singh, Davinder. “Lazard's 2020 Annual Review of Shareholder Activism.” *Lazard.com*, www.lazard.com/perspective/lazards-2020-annual-review-of-shareholder-activism/.

Taylor, David. “Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934” 20 Sept 2017. *SEC Edgar,* https://www.sec.gov/Archives/edgar/data/0000080424/000119312517289208/d449900ddefa14a.htm.