

Shareholder activism: Blessing or affliction for incumbent CEOs?

Jana P. Fidrmuc^a, Jesus Gorrin^{a*}, and Jiaqi Zhao^a

^a Warwick Business School, University of Warwick, Coventry CV4 7AL, United Kingdom

Abstract

We examine CEO career consequences following shareholder activism in their companies. Using the control function approach, we find limited evidence that it is shareholder activism that causes CEO career prospects to deteriorate post activism. We show that the result has to do with endogeneity in activist target selection; targeted CEOs would have been replaced even without activists' intervention. Moreover, considering hostility on both sides of the campaign, we show that CEO resistance to activism improves targeted CEOs' career prospects when activists decide not to go hostile. Campaigns involving hedge funds versus other activists exhibit more negative career consequences, still this effect is significantly mitigated for resistant CEOs. We also find a disciplinary effect of shareholder activism on targeted CEOs' board positions, but only when activists are hostile.

Keywords: Shareholder activism; Corporate governance; CEO careers

JEL Classification: G23; G30; G34

*Corresponding author.

E-mail addresses: jana.fidrmuc@wbs.ac.uk (J.P. Fidrmuc), Jesus.Gorrin@wbs.ac.uk (J. Gorrin), Jiaqi.Zhao@wbs.ac.uk (J. Zhao).

1 Introduction

With regular contact and information exchange, CEOs of publicly listed firms are adept at cultivating good investor relationships (Useem, 1996). CEOs, however, do not always enjoy quiet lives. If investors disapprove of a company’s management or operations, they may launch an activism campaign to exert pressure on the management and pursue performance and governance changes (Brav, Jiang, Partnoy, and Thomas, 2008; Klein and Zur, 2009). Several papers show positive corporate governance and performance consequences of shareholder activism, especially when led by hedge funds (for a review, see Brav, Jiang, and Li, 2022). In this paper, we focus on the targeted CEOs and explore the impact of activism on their careers.

The most relevant related papers for this research question are Brav et al. (2008) and Fos and Tsoutsoura (2014). Brav et al. (2008), with 1,059 hedge fund campaigns over 2001–2006, compare target firms with industry / size / book to market matched firms and show higher turnover for targeted CEOs post activism. However, CEO career consequences are not the focus of their study and therefore they do not explore CEO career changes in detail and do not fully address potential endogeneity issues. Fos and Tsoutsoura (2014) explore proxy contests with hostile activist involvement (706 events over 1996–2010) and their impact on careers of all incumbent board members, not just CEOs. It is unclear how these results for directors in hostile activism events extend to CEOs in non-hostile campaigns as proxy contests may have very specific consequences for the targeted CEOs. Moreover, the characteristics and dynamics of the director versus CEO job markets may be markedly different. For example, firms often face a more restricted talent pool for potential CEOs than for outside directors. Overall, the literature does not establish exhaustively the effect of shareholder activism for careers of targeted CEOs due to their methodology or sample / focus selection. Our paper fills this gap in the literature and brings novel results.

Our US shareholder activism sample over 2006–2018 covers both hostile and non-hostile campaigns as well as spans a variety of activist types, including both hedge fund

and non-hedge fund (non-HF) investors. The group of non-HF investors consist primarily of investment adviser firms, individuals, pension funds, and labor unions. These activists are largely unstudied, even though their interventions constitute around half of campaigns (51% in our sample) and have become more frequent (growing from 40% of all campaigns in 2006 to 60% in 2018).² By including all types of activists, we construct a thorough picture of the activism effect on targeted CEOs' careers. Moreover, the resulting large sample size reduces the probability of Type II errors (i.e., failures to detect real significant relationships).

We cross-reference data on shareholder activism campaigns from SharkRepellent with BoardEx and identify 2,207 unique CEOs in charge of the companies at the time of activism campaign filing. For all these targeted CEOs, we obtain their employment history from 1 year before until 3 years after the campaign from BoardEx. We construct career outcome variables that reflect three different but complementary aspects of CEO careers: CEO (executive) positions, board memberships, and compensation.³ Additionally, we collect data on non-targeted CEOs over the same period.

We estimate the activism effect using both the control function approach (Heckman, 1979; Vella and Verbeek, 1999) and OLS regressions, and contrast the results. The literature points to the nonrandom choices by shareholder activists when picking their target firms (Brav et al., 2008; Klein and Zur, 2009), which implies that career outcomes are most likely determined differently for targeted versus non-targeted CEOs. Non-targeted CEOs are not necessarily a good counterfactual for targeted CEOs. Simply employing an OLS regression to estimate the activism effect may, and indeed does, produce biased estimates and flawed conclusions. The control function approach with exclusion restrictions deals with endogeneity and allows for identification of the effects of activism on CEO

²Klein and Zur (2009) and Greenwood and Schor (2009) are among the few to include non-HF activists. They show that these activists achieve their goals successfully and make significant changes at target firms in a similar manner to activist hedge funds.

³Similar to ExecuComp, disclosures of compensation for CEOs in BoardEx cover only large public companies associated with the S&P 1500 index. All inferences about compensation in this paper are limited by this data coverage.

careers. We use two exclusion restrictions that affect the probability of targeting and are potentially exogenous to CEO career outcomes in the absence of activism: (i) the staggered board provision and (ii) the mutual fund ownership conditional on illiquidity.⁴ In addition, we allow that the covariance between error terms from the targeting and career outcome regressions varies for targeted and non-targeted CEOs, which helps to establish and interpret the source of endogeneity.

As our baseline result, we show that once we correct for endogeneity through the control function approach, shareholder activism has on average no statistically significant effect on CEOs' future careers. This is in contrast to a negative effect found through OLS. Our control function results are robust to a two-stage least square and matched sample approaches. Specifically, we find no differences between targeted versus non-targeted CEOs in their prospects of keeping their executive and board positions, and in their compensation. The result stems from the fact that targeted CEOs would be forced out anyway, without shareholder activism. Error terms from the targeting and CEO career outcomes equations correlate negatively for targeted CEOs, which suggests that an unobservable characteristic, such as targeted CEOs' lower quality or a CEO-firm mismatch, links with both activist targeting and CEO career outcomes. For example, lower quality CEOs are more likely to be targeted by shareholder activists and, at the same time, they have lower career prospects. Even without presence of shareholder activism, the poor CEO quality links to CEO dismissal. Note though that our 'insignificance result' does not mean that shareholder activists are inactive in pushing low quality CEOs out of their positions. It just means that activists are not the source of this change; the source of the change is linked to unobservable CEO (or firm) characteristics.

Because timing is important in CEO turnover, we also ask whether shareholder activism expedites CEO replacements at target firms. To address this question, in unreported tests we examine CEO career changes over shorter event time windows, from year -1 through year $+1$ and from year -1 through year $+2$. We find no significant differ-

⁴Our results are robust for analysis with only one exclusion restriction at a time.

ence in career outcomes between targeted and non-targeted CEOs within these short time frames. We note, however, that the insignificant career effects of shareholder activism do not go against the positive valuation effects documented by prior literature concerning shareholder activism; it just indicates that on average, the value creation in shareholder activism does not stem from ousting the incumbent CEOs. This is not too surprising, since the returns to activism mainly depend on the activist achieving their stated goals (Becht, Franks, Grant, and Wagner, 2017) and removing officers accounts for less than 1% of the total activism events in our sample.

Another important distinguishing feature of our analysis is that we consider CEO career consequences depending on campaign hostility on the activists' side, but also on the incumbent CEOs' side. We build on Boyson and Pichler (2019) and develop a measure of expected incumbent CEO's resistance, which allows to explore important strategic interactions between activists and CEOs. Intuitively, CEO resistance affects the activists' decision to target a firm because the perceived resistance may serve as an antipole to activism. At the same time, CEO resistance may also impact activist tactics once activism materializes into active campaigns, especially the decision to go hostile. Ultimately, the interplay in hostility impacts CEO career outcomes. In particular, CEO resistance may be effective and link with better CEO career prospects conditional that activists are eventually not hostile. However, if CEO resistance turns ineffective in curbing activism hostility, it may further harm CEO career prospects because activist hostility sends a bad signal about their abilities and strategic choices.

The novel measure of CEO resistance is based on principal component analysis incorporating five CEO and firm characteristics available for both targeted and non-targeted CEOs (Boyson and Pichler, 2019). Hostility on the side of shareholder activists is defined based on campaigns involving threats or launches of proxy contests, takeovers, lawsuits, or calls for replacement of management/directors (Brav et al., 2008). Our results incorporating hostility on both sides show two significant effects. First, we find that targeted CEOs suffer negative activism consequences only for their inside board positions and only

when the activists turn hostile. In line with Fos and Tsoutsoura (2014), almost two thirds of the incumbent CEOs (0.61) leave their own boards within three years after a hostile event. Second, CEOs who resist have a significantly better chance of keeping executive positions so long as the activists do not escalate to hostility. Strategic resistance pays off.

In an additional analysis, we contrast hedge funds versus other activist types. We show that hedge fund campaigns associate with more severe CEO career consequences even in non-hostile campaigns. Incorporating the interplay of the two sides of hostility into our estimation, we find that resisting CEOs significantly dampen the negative career impact of hedge fund activism in non-hostile campaigns.

Our contribution to the literature is three-fold. First, we contribute to the literature on consequences of shareholder activism. The literature has mostly focused on effects of activism on targeted firms.⁵ Our paper contributes to this literature by focusing on activism effects on incumbent CEOs' future career prospects. Our analysis is comprehensive as it includes all types of activists, distinguishes the career effects by hostility on both sides of the campaign, and examines CEOs' prospects spanning executive and board levels. Our results underscore the importance of controlling for endogeneity and of the CEO-activist hostility interactions.

Second, we contribute to the literature on the ex-post settling-up problem. Fama (1980) argues (page 289) that "Individual participants in the firm, and in particular its managers, face both the discipline and opportunities provided by the markets for their services, both within and outside the firm." Several scholars test and support this assertion. For instance, Kaplan and Reishus (1990) find that executives of firms with dividend cuts receive less outside directorships. Eckbo, Thorburn, and Wang (2016) show that CEOs leaving the executive labor market after their firm files for bankruptcy suffer a significant compensation loss, while CEOs that achieve restructuring or find another executive position do not experience changes in compensation. Fos and Tsoutsoura (2014) report adverse career consequences of proxy contests on incumbent board members. Our

⁵See for example Dodd and Warner (1983); Wahal, Wiles, and Zenner (1995); Karpoff, Malatesta, and Walkling (1996); Carleton, Nelson, and Weisbach (1998); Brav et al. (2008); Klein and Zur (2009).

results support the ex-post settling-up hypothesis indirectly. Even though we do not find any significant activism effects for CEO career outcomes on average, this is after accounting for endogeneity between activism targeting and career outcomes. Indeed, the endogeneity correction in the control function approach suggests that targeted CEOs are of lower quality (unobservable characteristic) and would be replaced anyway even without involvement of shareholder activists. So, the disciplining mechanism is present, it just does not flow exclusively through activists' involvement. Boards seem to be effective in replacing low-quality CEOs. Still, activists are pivotal for CEOs losing their internal board positions when activists turn hostile.

Finally, our paper contributes to the literature on the labor market for executives. Theoretical models posit reasons why career consequences experienced in the labor market may mitigate potential agency conflicts (see, for example, Fama, 1980). However, recent empirical evidence challenges the efficiency of CEO matching in public firms, which is necessary for the theoretical predictions to hold. For example, Cziraki and Jenter (2022) find that CEOs in public firms are mostly promoted internally and that poaching of CEOs from other public companies is very rare (about 3.2%). This is at odds with a frictionless market for CEOs. In contrast to public firms, PE backed firms appoint external CEOs more often (Gompers, Kaplan, and Mukharlyamov, 2023). Contributing to this literature, our analysis points to a presence of negative career consequences in the executive labor market. Our results suggest that corporate boards push out low quality CEOs and shareholder activists typically also target these low quality CEOs.

The rest of the paper proceeds as follows. Section 2 describes the sample: our choice of CEO, firm, and campaign characteristics for the analysis, the construction of CEO resistance measure, and the empirical framework. Section 3 presents the baseline results. Section 4 explores hostility both from CEOs and activists. Section 5 provides evidence on the effects of hedge fund activism and Section 6 concludes.

2 Data and methodology

2.1 Data

We start with a comprehensive sample of shareholder activism campaigns against US public companies during the period of 2006 to 2018. The sample period is based on our availability of activism data from the SharkRepellent database. Following prior studies, we exclude all campaigns involving merger arbitrage, as the motives and consequences of merger arbitrage strategies fundamentally differ from regular shareholder activism (Brav et al., 2008).⁶ We also exclude campaigns initiated exclusively by religious groups because these campaigns usually pursue improvement in human rights and/or labor standards rather than change to company management or operations (Proffitt Jr and Spicer, 2006). Religious groups are included if they participate in a joint campaign with another activist type. Appendix A provides detailed information about activist identities.

For the remaining campaigns, we identify the CEOs leading the targeted companies at the time of the campaign announcement using information from BoardEx. The final sample covers 3,799 activism campaigns and 2,207 unique CEOs between January 1, 2006 and December 31, 2018. Table 1 provides information on campaign distributions across different categories starting with distribution across Fama-French 12 industries in Panel A. We can see a higher concentration of target firms in the business equipment and finance industries, highlighting the importance of industry fixed effects in the regression analysis.

Insert Table 1 about here

Panel B shows the distribution of shareholder-activism events by activist type. Note that some campaigns involve more than one activist and therefore activist types do not add to the total of 3,799. Hedge funds stand out as the dominant activist type with 1,879 (49%) campaigns. The high frequency of hedge-fund engagement in activism is

⁶We cross-verify the announcement and completion dates of M&As from the SDC database with the activism announcement dates in our sample. Any activism event occurring after the M&A announcement but before its completion is considered as merger arbitrage and consequently removed from our sample.

consistent with their strong financial incentives and trading flexibility due to less stringent regulations (Brav et al., 2008). Panel C presents the activists' primary stated objectives. More than one third of campaigns aim at accomplishing full or partial corporate control changes, suggesting that shareholder activists are likely to provide discipline.⁷ Campaigns concerning voting and campaigns stating a broad goal of 'maximizing shareholder value' or 'enhance corporate governance' account for 27% each. The remaining categories are relatively infrequent and related to short positions or supporting fellow activists.

Panel D provides frequencies by activists' tactics that concern hostility of their approach. Guided by Brav et al. (2008), we classify activist tactics into three categories from the least to the most hostile.⁸ Since activists may adopt multiple tactics, the total percentage across the three categories and within each category may exceed 100%. The most common, with 58%, is Category 2 which includes sending publicly disclosed letters to the board/management (36%) or to stockholders (24%). This pattern seems reasonable given that at early stages of their interventions activists employ less costly and hostile tactics and they increase hostility only when necessary (Gantchev, 2013). Also note that 28% of campaigns in our sample involve proxy fights, takeovers, or lawsuits, dovetailing with the view that shareholder activism potentially involves disciplining of management.

Panel E categorizes campaigns into hostile and non-hostile using information from Panels C and D. Hostile campaigns involve threats or launches of proxy contests, takeovers, lawsuits, and campaigns advocating for replacement of management/directors. Non-hostile campaigns are the complement to hostile ones. Most campaigns (69%) are not hostile and hedge funds tend to be more hostile than other activist investors. Panel F summarizes the number of campaigns of individual CEOs. Most CEOs (62%) experience shareholder activism only once, but 15% of our sample CEOs face 3 or more campaigns.

⁷Full control contests involve conquering the majority of board seats and acquisition attempts. Partial control contests include efforts to elect a short slate of directors and to oust directors and officers.

⁸Detailed definitions are provided in Appendix B.

2.2 CEO resistance

Targeted firms have the choice to resist the activist or negotiate with them (Boyson and Pichler, 2019). When targets resist, they often take a hostile action by leveraging an antitakeover provision that is ready to be used, by modifying their corporate charters or bylaws to restrict shareholder voting power, or by filing lawsuits against activists. Responding to this resistance, activists can counterresist by initiating a proxy contest, filing a lawsuit, or making an unsolicited tender offer. The important point is that campaign hostility is double sided and it is essential to account for hostility of both CEOs and activists. Previous literature considers hostility on the activists' side, but CEO resistance to activism usually remains ignored. Still, it is very likely that CEO resistance affects activists' targeting, their hostility, and CEO career outcomes. An important challenge is that CEO resistance is difficult to measure because it is not always observable.⁹

Nevertheless, Boyson and Pichler (2019) identify CEO and firm characteristics indicative of hostile CEO resistance. They show that CEO resistance is more likely when the target CEO has a longer tenure and holds also the board chair. Furthermore, cash holdings and institutional ownership concentration also correlate positively with hostile CEO resistance, indicating a link with agency problems and a threat of investor coordination. As the four variables due to Boyson and Pichler (2019) are general CEO or firm characteristics, we can use them to proxy for CEO resistance not only for targeted CEOs, but also for all firms in our sample. Importantly, this allows us to include the CEO resistance as an explanatory variable in predicting activism targeting, the first stage in our estimation procedure.

We expand the set of CEO resistance determinants by including the CEO retirement age. Drawing upon the upper echelons theory (Hambrick and Mason, 1984), a CEO's age may serve as an important determinant of their strategic choices, with older CEOs

⁹Although interactions between large shareholders and management in publicly traded US firms are common, usually they involve private negotiations (Becht, Franks, Mayer, and Rossi, 2009; Dimson, Karakaş, and Li, 2015). Shareholder activists, through their earlier confidential communications, understand the management's perspective and their potential resistance before taking any public measures.

being more resistant to changes. We consider CEOs in retirement age, because this group may have significantly less stamina to implement changes (Child, 1974) and fewer career options if forced to leave (Veiga, 1983). Moreover, the literature suggests that age may affect CEO preferences and risk-taking (Jenter and Lewellen, 2015; Serfling, 2014). As a result, retirement-age CEOs may be more prone to resist activist targeting.

We create a CEO resistance dummy based on the five characteristics; CEO tenure, CEO-chair duality, retirement-age CEO, cash holdings, and institutional ownership concentration. Using data from BoardEx, Compustat, and FactSet, we employ a principal component analysis and obtain two components with eigenvalue greater than one. Table 2 with the principal component analysis results shows that the first component is characterized by long CEO tenure, CEO-chair duality, and CEOs in retirement age, whereas the second component loads highly on cash holdings and ownership concentration. The two components explain majority of the total variation (54%) and they give roughly equal weights to their representative variables. The first component summarizes the overall impact of CEOs' characteristics on their resistance decision making, while the second component depicts the role of firms' governance environment in shaping firm CEOs' resistance decision.

Insert Table 2 about here

Next, we construct a resistance index by aggregating the two components; weighting each component by its contribution to the total variance of the five variables associated with resistance. The value of the index increases with values of all components, which is in line with Boyson and Pichler (2019) and indicates a higher level of CEO resistance. Finally, we create a dummy variable, CEO resistance, that equals one for firm CEOs with a resistance index above the sample median and zero otherwise.

2.3 Methodology

We examine CEO career consequences of shareholder activism by comparing changes in various career outcomes from the year before to three years after the activist campaign

between target and non-target CEOs. We focus on career outcomes at executive and director levels. Specifically, our outcome variables capture: (i) keeping the current CEO position, (ii) keeping a CEO position in any firm, (iii) keeping the current executive position (note that this is a wider category than the CEO position), (iv) keeping an executive position in any firm, (v) keeping the current inside board seat, (vi) change in the number of outside board seats, (vii) change in remuneration, both total and associated with the current versus other employment. We also distinguish between positions in public versus private firms where applicable.

Our data comprises a cross section derived from activism campaigns between 2006 and 2018. For each activism campaign, we focus on the target firm CEO i . We define the event year t_0 as the fiscal year c when the 13D filing occurs. In fiscal year c , for all targeted CEOs, we include, as counterfactuals, CEOs of all publicly listed firms that did not experience any activism event throughout the entire period covered in our dataset. This means that the counterfactual CEOs are matched in fiscal year c . Note that this sample choice keeps the ratio of targeted and non-targeted CEOs the same as in the population of CEOs of listed firms. The targeted and non-targeted CEOs correspond to the two groups compared in Table 3 below.

The following equation explains the effect on career outcomes of being targeted by activist shareholders:

$$(1) \quad \Delta W_i = \alpha_d + \beta_d T_i + X_i \gamma_d + \varepsilon_{di},$$

where ΔW is the change in a career outcome from year t_{-1} to year t_{+3} and we interchangeably include all categories of career outcomes listed at the beginning of this section.¹⁰ Our coefficient of interest is β_d , which determines the effect of activism targeting T on outcome ΔW . However, it is highly likely that targeting and career outcomes are endogenous and we should not assume that error terms ε_d are uncorrelated with T . Indeed, Brav et al. (2008) show that activist investors do not randomly choose their targets. Therefore, following Vella and Verbeek (1999) we model career outcomes for targeted and non-targeted

¹⁰These 7 categories involve 17 separate variables. All variables are summarized in Table 3.

CEOs separately:

$$(2) \quad \Delta W_{0i} = \alpha_0 + X_i\beta_0 + \varepsilon_{0i},$$

$$(3) \quad \Delta W_{1i} = \alpha_1 + X_i\beta_1 + \varepsilon_{1i},$$

$$(4) \quad T_i = I(Z_i\gamma + \varepsilon_{ti} > 0),$$

where we observe ΔW_{1i} if $T_i = 1$ and ΔW_{0i} otherwise. $I(\cdot)$ is an indicator function, Z is a matrix of explanatory variables that includes X and valid exclusion restrictions that affect activism targeting but not CEO career outcomes. We identify activism targeting with two exclusion restrictions: (i) the presence of staggered board, and (ii) the change in mutual fund ownership conditional on stock illiquidity, which are described in Section 2.4.

Continuing on the system in (2)–(4), the observed outcome is

$$(5) \quad \Delta W_i = \alpha_0 + \alpha T_i + X_i\beta + T_i \times \varepsilon_{1i} + (1 - T_i) \times \varepsilon_{0i},$$

where we assume that $\beta_0 = \beta_1 = \beta$, α is equal to $\alpha_1 - \alpha_0$, and T is modeled in (4). Then the conditional expectation of ΔW given Z and T is

$$E\{\Delta W_i|Z_i, T_i\} = \alpha_0 + \alpha T_i + X_i\beta + T_i \times E\{\varepsilon_{1i}|Z_i, T_i = 1\} \\ + (1 - T_i) \times E\{\varepsilon_{0i}|Z_i, T_i = 0\},$$

$$(6) \quad E\{\Delta W_i|Z_i, T_i\} = \alpha_0 + \alpha T_i + X_i\beta + T_i \times \sigma_{1,t}\lambda_i(Z_i\gamma) + (1 - T_i) \times \sigma_{0,t}\lambda_i(Z_i\gamma),$$

where we assume joint normality of the errors ε_d and ε_t , $\sigma_{1,t}$ is the covariance between ε_1 and ε_t , $\sigma_{0,t}$ is the covariance between ε_0 and ε_t , and

$$(7) \quad \lambda_i(Z_i\gamma) = E\{\varepsilon_{ti}|Z_i, T_i\} = (1 - T_i) \frac{-\phi(-Z_i\gamma)}{\Phi(-Z_i\gamma)} + T_i \frac{\phi(-Z_i\gamma)}{1 - \Phi(-Z_i\gamma)}$$

is the generalized residual of the probit model describing the target type decision and $\phi(\cdot)$ and $\Phi(\cdot)$ represent the probability density and cumulative density functions, respectively. To estimate (6), we first run the probit model (4) and estimate $\hat{\gamma}$. Then we compute the estimated value of λ following (7). This is the inverse Mills ratio (IMR). Finally, using OLS we run

$$(8) \quad \Delta W_i = \alpha_0 + \alpha T_i + X_i\beta + \delta_1 T_i \times \hat{\lambda}_i(Z_i\gamma) + \delta_0(1 - T_i) \times \hat{\lambda}_i(Z_i\gamma) + \eta_i$$

with industry and year fixed effects. Standard errors are adjusted for heteroscedasticity and clustered at the firm and year level. Equation (6) represents the control function (CF) approach to treatment effects based on Heckman (1979) as discussed in Vella and Verbeek (1999). A similar approach is used in Rutherford, Springer, and Yavas (2005) to adjust for endogeneity of agent-owners when determining prices of sold properties.

To summarize, we are interested in capturing the ‘random’ additional effect of T , but estimating β_d in (1) using OLS yields a biased estimate due to endogeneity. The CF approach allows to estimate the average effect of a ‘random’ selection of a targeted CEO, accounting for unobservables related to the target assignment that may be correlated with career outcomes. The model accounts for this potential source of endogeneity by including the estimated value of λ in the career outcome regression. The CF approach also allows to estimate the covariance between ε_1 (ε_0) and ε_t , σ_{1t} (σ_{0t}), without the need to impose that the two covariances are equal. Estimation of σ_{1t} and σ_{0t} provides more information about the economics of treating CEOs as target versus non-target types.

2.4 Exclusion restrictions

To identify the effect of activism on CEO careers, we use the CF approach with exclusion restrictions. A suitable exclusion restriction should significantly predict activism campaigns, but also affect CEO labour outcomes only indirectly through activism. This section introduces briefly our two exclusion restrictions and our arguments for their suitability. We provide more detailed discussion of the exclusion restrictions in Section I.A in the Internet Appendix.

Staggered board is a dummy variable for a focal firm with a staggered board provision. Intuitively, a staggered board provision may deter activism by reducing the ability of activists to generate change. Indeed, the first stage of the CF system (Table I.1 in the Internet Appendix) shows a significantly negative coefficient for the staggered board dummy in predicting activism targeting. The first potential criticism of this exclusion restriction is mechanistic; the targeted CEO is potentially protected from being fired for the full staggered board cycle. In particular, if only a third of the board could be replaced

in one year, the CEO may not be replaced immediately in the campaign year, but only 2 further elections later. We take care of this mechanistic link by considering CEO position changes up to year 3 after the campaign. Taken care of the mechanistic link, it should still hold that the staggered board provision does not affect CEO careers in the absence of activism. In line with this condition, previous literature shows that board declassification does not increase CEO turnover to performance or CEO pay to performance sensitivity (Ge, Tanlu, and Zhang, 2016). Moreover, staggered board provisions also do not generate career differences for CEOs after acquisitions, which is an alternative control event (Bates, Becher, and Lemmon, 2008).

The change in mutual fund ownership conditional on stock illiquidity is an interaction term between the change in the mutual fund ownership for the focal firm and its stock illiquidity (using Amihud, 2002). Identification strategies based on interaction instrumental variables are used also in, for example, Chaney, Sraer, and Thesmar (2012) and Ahmadi, Kecskés, Michaely, and Nguyen (2024). We expect a positive relationship between this variable and activism. This is because when a stock is illiquid, mutual funds find it more costly to divest their shares and this in turn increases the likelihood of their potential cooperation with activists and eventually of activism. As expected, Table I.1 in the Internet Appendix confirms that this variable significantly increases the probability of activism. Moreover, the literature does not provide any arguments for changes in mutual fund ownership conditional on illiquidity affecting CEO careers directly in absence of activism. Changes in passive mutual fund ownership do not in general correlate with fundamentals (Gantchev and Jotikasthira, 2018). In addition, the overidentification test in Section I.A in the Internet Appendix shows that both exclusion restrictions are valid.

3 Baseline results

Table 3 presents summary statistics for data on targeted and non-targeted CEO characteristics and characteristics of their respective firms.

Insert Table 3 about here

The variables related to changing positions are measured using three potential outcomes relatively to t_{-1} : -1 if the focal CEO loses the position, 0 if they keep the position, and 1 if they gain the position.¹¹ Table 3 shows that, on average, CEOs lose their current position and are also less likely to hold any CEO position, including in other firms, from year t_{-1} to t_{+3} around the year of targeting (or the corresponding year for counterfactuals, which we refer to as pseudo targeting year). The corresponding averages are -0.34 and -0.25 , respectively. This is expected because we condition on CEOs being in their positions at t_0 , which means that they can gain the position only if they did not hold it at t_{-1} . Targeted CEOs suffer significantly more than non-targeted CEOs with means of -0.48 versus -0.33 (-0.34 versus -0.24) for current (any) positions. Surprisingly, the means for executive positions closely resemble those for CEO positions, despite executive positions covering a wider range of options. This suggests that CEOs do not frequently transition to lower executive positions.

The average for current inside directorships is -0.27 , which is somewhat less negative than for current CEO positions, suggesting that CEOs are on average likely to keep board positions after leaving as executives. Targeted CEOs are significantly less likely to keep their board positions (-0.43) than non-targeted CEOs (-0.25). On average, CEOs are likely to acquire new outside board positions. The average increase in the number of outside board seats is 0.23 and is not significantly different between targeted and non-targeted CEOs. The changes in directorships come equally from public and private firms.

We only have compensation data for large publicly listed firms as covered in BoardEx which means that our compensation sample is significantly smaller. To avoid missing observations or zeroes we measure changes in CEO compensation using two metrics. First, we measure the direction of compensation changes. The change in total pay (inside and outside) takes three values: -1 for pay decreases, 0 for no changes, and $+1$ for pay

¹¹Note that we start with set CEOs who were targeted by activists at t_0 and in some cases these CEOs were not in the position at t_{-1} . In addition, our results remain consistent when analysing CEO career changes during the $[0,+3]$ -year window (results not tabulated). In this case, the variables related to changing positions take only two values: -1 if the focal CEO loses the position and 0 if they keep the position.

increases. This measure is robust to outliers. The average for the total pay change is 0.18, indicating that an increase in total pay is 18 percentage points more likely than a decrease. This likelihood is significantly higher for non-targeted (0.19) than for targeted CEOs (0.10). The change in outside pay does not vary with targeting. The second measure uses the logarithm of growth rates of pay. Under this metric, we observe a small total pay decline of 2% per year on average. This decline is significantly larger for targeted (-7%) than for non-targeted CEOs (-1%). Overall, these statistics show that increases and decreases in pay are asymmetric. While majority of CEOs experience pay increases, pay decreases tend to be larger. Therefore, it is important to separate these effects and use both measures.

11% of CEOs in our sample are targeted by shareholder activists. Targeted CEOs are less likely to have staggered boards (0.45 versus 0.52 for non-targeted CEOs), which signals that classified board provisions are effective in fending off activism campaigns. The means for the change in mutual fund ownership conditional on stock illiquidity (change in MF ownership x illiquidity) are not different between targeted versus non-targeted firms. This is because the univariate mean differences do not control for firm size.¹²

Turning to CEO characteristics, we can see that CEO resistance is smaller for the target sample, corroborating the view that activists endogenously choose targets where they expect weaker resistance from the CEOs. Targeted CEOs are also more likely to be females, with shorter tenure, higher education and ability (measured following Custódio, Ferreira, and Matos, 2013). Firm characteristics of targets are consistent with the literature (for example in Brav et al., 2008, 2022). Target firms show better accounting performance and worse stock performance than non-targets. They also have higher analyst coverage, larger boards, and a higher fraction of independent directors and directors with higher reputation stock/concerns. The latter three board characteristics may suggest better corporate governance. Still, target firms are significantly more likely to have higher CEO-chair duality. Furthermore, targeted firms exhibit higher institutional

¹²Targeted firms are larger (log of the market value of equity is 6.96 versus 6.30), so they are more liquid; they have smaller Amihud ratio (1.49 versus 2.06).

ownership and ownership by both pro-dissident and pro-management mutual funds (constructed following Brav, Jiang, Li, and Pinnington, 2021). Finally, retirement-age CEO, cash holdings, and institutional ownership concentration, together with CEO tenure and CEO-chair duality, define CEO resistance. The average number of directorships held by incumbent outside directors and the fraction of youth among them (below 70 years of age), in conjunction with analyst coverage, serve as proxies for the reputation concerns of the board (Bebchuk, Brav, Jiang, and Keusch, 2020).

3.1 Changes in executive positions

Table 4 explores the impact of shareholder activism on targeted CEOs keeping their CEO and executive positions. It shows results of estimating Equation (8) for keeping the current CEO (executive) position in Column 1 and any CEO (executive) position in Column 2 in Panel A (Panel B). The variable for any positions is broader than for current positions because it includes new CEO (executive) positions in different companies. Any CEO (executive) positions are then split into positions in publicly listed (Column 3) and private companies (Column 4). Columns 5 to 8 show OLS estimates as in Equation (1) without accounting for endogeneity. Estimation results for the probability of targeting, the first stage Equation (4), are reported in Column 1 in Table I.1 in the Internet Appendix.

Insert Table 4 about here

Our primary coefficient of interest is the coefficient for the target dummy but first we discuss the two coefficients for the inverse Mills ratio (IMR). The two IMR coefficients represent $\hat{\delta}_1$ and $\hat{\delta}_0$ in Equation (8) and are a function of ρ_1 (correlation between ε_1 and ε_t) and ρ_0 (correlation between ε_0 and ε_t), respectively.¹³ A significant $\hat{\delta}_j$ shows that changes in CEO positions are endogenous to unobservable determinants of activist targeting. However, an insignificant $\hat{\delta}_j$ may not indicate an absence of endogeneity (Guo

¹³The IMR coefficients as well as ρ are similar for CEO versus executive positions in Panels A and B, respectively. We interpret them focusing on Panel A with CEO positions, but the discussion applies also for executive positions.

and Fraser, 2014). We should examine ρ_j because sample selection bias emerges due to correlation between the error terms even at low levels.

As $\hat{\delta}_1$ is significantly different from zero (in Columns 1–3), we have evidence that changes in CEO positions are endogenous to unobservable determinants of activist targeting and the OLS coefficients for the target dummy are biased. The effect of IMR differs between targeted and non-targeted CEOs and is significant only for targeted CEOs. A significantly negative coefficient for ‘IMR x target’, $\hat{\delta}_1$, indicates a negative correlation, $\hat{\rho}_1$, between error terms in (3) and (4). This negative correlation implies that for targeted CEOs, unobservable factors that raise CEO’s career prospects tend to occur together with unobservable factors that lower activism targeting. This would be the case, for example, for CEO quality which is very hard to measure; highly able managers tend to keep their jobs and decrease the probability of activist targeting. Examining $\hat{\rho}_0$ and $\hat{\rho}_1$ at the bottom of the table, we can see that χ^2 is significant in Columns 1–3 at the 1-percent level, indicating that we can reject the null hypothesis that ρ_0 and ρ_1 are jointly zero.

Now, we turn to examining the effects of targeting on CEO career outcomes. The coefficients for the target dummy in Table 4 are different, in magnitude and significance, between the CF model in Columns 1–4 and the OLS model in Columns 5–8. The OLS coefficient for the target dummy in Column 5 is negative and statistically significant at the 1% level suggesting that shareholder activism has a strong negative effect on CEOs keeping their current positions, which parallels the findings in Brav et al. (2008) and Bebchuk et al. (2020). However, the target effect becomes positive, though insignificant, in Column 1 when the estimate is corrected for endogeneity. We reach the same conclusion also in Columns 2 and 3 for any CEO positions and any public CEO positions, respectively. In general, accounting for endogeneity yields insignificant effects of activist targeting on CEO positions, whereas failure to do so results in identifying a faulty disciplinary effect of activism. This suggests that targeted CEOs would have lost their CEO positions anyway even without activist intervention, perhaps because they are low quality CEOs. Note that the targeting effect for any CEO positions in private firms is significantly positive in the

OLS regression in Column 8, but turns insignificant in Column 4 in the CF model.

Examining control variables, we can see that the coefficient estimates are often different (even with opposite signs) in Columns 1–3 with CEO positions in public firms versus Column 4 for CEO positions in private firms. High CEO resistance decreases the chances of CEOs keeping their positions, but the CEO resistance coefficient is insignificant for positions in private firms. The dummy for female CEOs is insignificant for public firms, but negative and significant for private firms. High general ability index decreases the chances of the CEO keeping a position in a public firm, but increases the probability of gaining a position in a private firm. Concerning firm characteristics at the time of targeting, CEOs keep their public-firm positions in larger firms that perform well, while accounting performance and analyst coverage are not important. CEOs gain positions in private firms when their firms were smaller and their accounting performance was poorer. Independent directors, board reputation, and institutional ownership correlate with losing public CEO positions. This suggests higher CEO turnover in better-governed firms. Corporate governance variables are not related with CEO positions in private firms.

Panel B in Table 4 explores the effects on executive positions, which are more widely defined than CEO positions. If a CEO switches to another executive position within the current firm, the dependent variable in Column 1 would be still kept at 0 in Panel B, while in Panel A it would change to -1 . Because the sign and statistical significance of the coefficients in Panel B are the same as in Panel A, we can interpret the estimates in a similar way. The key result is that shareholder activism on average has no impact on targeted CEOs keeping their CEO and executive positions.

3.2 Changes in board seats

Table 5 explores the impact of shareholder activism on CEOs' career prospects in the director labor market. First, in Column 1 we analyze changes in inside board positions, board positions that CEOs hold in their current firms at t_0 . The corresponding OLS specification is in Column 5. Neither of the two IMR coefficients are statistically significant, but the χ^2 test at the bottom of the table shows that ρ_0 and ρ_1 are jointly

significantly different from zero. So, we have evidence of endogeneity and correcting for it is again essential. The OLS coefficient for the target dummy in Column 5 is negative and statistically significant, while it turns insignificant in the CF model in Column 1. Even though the coefficient does not change, the standard error increases tenfold. Adjusting for endogeneity, we find an insignificant effect on CEOs' current board positions.

Insert Table 5 about here

Columns 2 to 4 focus on the change in the number of outside board seats from t_{-1} to t_{+3} . The target dummy coefficient is statistically insignificant in Column 2 for all outside positions. Endogeneity is not confirmed through a significant χ^2 test, but the OLS coefficient in Column 6 is also insignificant. This is the case also for board positions in private firms in Columns 4 and 8. Board positions in public firms show a significant negative effect in the OLS regression (Column 7), but we observe a correlation between the error terms, ρ_0 (though at a low level), and the targeting effect in the CF model is statistically insignificant. Overall, the CF model coefficients for the target dummy are insignificant, which means that changes in board seats are not statistically different between targeted versus non-targeted CEOs.

3.3 Changes in compensation

Table 6 shows the impact of shareholder activism on overall CEO compensation, defined as an ordinal variable that takes the value +1 for pay increases, 0 for no changes, and -1 for pay decreases. This measure is robust to outliers. Column 1 shows changes in total compensation, while Columns 2 and 3 focus on compensation from the targeted firm (inside) versus compensation from other firms (outside), respectively. The IMR coefficients are not statistically significant across any of the specifications, but the χ^2 test shows that the correlation between error terms is large and significant. Compared to the OLS results in Columns 4 and 5, the target coefficients for total and inside compensation in the CF model are larger in magnitude, but with larger standard errors. The effect of

targeting on changes in total and inside compensation is negative but not significant. The effect for outside pay is insignificant on both models.

Insert Table 6 about here

Importantly, these results do not depend on our compensation metric. Panel A in Table I.2 in the Internet Appendix uses the logarithm of growth in total and inside compensation and confirms that changes in compensation have a negative but not significant coefficient when using the control function approach.

3.4 A case of shareholder activism and CEO career changes

3.5 Alternative estimation methods

First, we test whether the baseline results are robust to the use of the two-stage least square regression (2SLS). In the first stage of the 2SLS model for activism targeting, we use Equation (4) and estimate the fitted value $\hat{T}_i = Z_i\hat{\gamma}$. Then, we estimate coefficients of the second stage OLS model: $\Delta W_i = \alpha_0 + \alpha\hat{T}_i + X_i\beta + \eta_i$. The results (not tabulated) are qualitatively similar to those obtained with the control function approach.¹⁴

Second, as several studies have used matching procedure to control the endogeneity of activism targeting (e.g., Brav et al., 2008), we match each targeted firm-CEO one year before the activist campaign to four non-targeted firm-CEOs from the same Fama-French 48 industry and fiscal year that are the closest in market capitalisation. The OLS coefficients for the matched sample (not tabulated) are similar to our original OLS coefficients, but we still find evidence of endogeneity; the error terms for targeting correlate with error terms for career outcomes. This shows that the matching procedure, based only on observable characteristics, does not solve the endogeneity problem and the OLS results are still biased.¹⁵ As a result, we have to rely on the CF approach even with the matched sample. The baseline results hold when we adjust for endogeneity.

¹⁴As per the study by Vella and Verbeek (1999), the restricted CF estimator is at least as efficient as the instrumental variable estimator.

¹⁵Note that this is also the case when we perform a propensity score matching based on all covariates in Table I.1 in the Internet Appendix.

4 Campaign hostility

The previous section explores the average CEO career effects of shareholder activism. We find that once we correct for endogeneity, shareholder activism has on average no statistically significant effect on CEOs' future careers. This section differentiates career effects by hostility on both sides of the campaign and considers strategic interactions in hostility between CEOs and activists. The CEO resistance dummy represents potential hostility on the side of the incumbent CEO and, as described in Section 2.2, it is available for all sample firms. Activist hostility is defined in Section 2.1 as involving threats or launches of proxy contests, takeovers, lawsuits, or activists advocating for replacement of management/directors. This dummy variable is naturally available only for observations with campaign data (targeted CEOs).

CEOs' reactions to activism may be hostile or non-hostile, strategically interlocking with activists' choice of tactics and ultimately altering CEOs' career outcomes. On the one hand, hostile actions taken by the targeted CEOs may be effective in restricting activism attacks and improving CEOs' job prospects. But an improvement in future career prospects with CEO resistance can be expected only when activists eventually do not go hostile. On the other hand, CEO resistance in the face of expected activist counter-resistance may further harm CEOs' career prospects because of harming shareholders' interests. So, optimally, CEOs' resistance may pay off in CEOs' advantage only with activists' non-hostility. We incorporate these interactions of hostility in our analysis.

Incorporating the two-sided hostility into our estimation framework, we have to adjust the CF model. To differentiate activist hostility in the first stage, we estimate the targeting Regression (4) as an ordered probit model with the dependent variable equal to zero, one, or two for CEOs who experience no campaign, non-hostile campaign, and hostile campaign, respectively. As in the previous section, we still include CEO resistance as an explanatory variable in the first stage. Estimation results for the first stage with no campaign as the reference category are reported in Table I.1 in the Internet Appendix. Column 3 shows the estimated coefficients and Columns 4 and 5 show the marginal effects

on the probability of observing non-hostile and hostile outcomes, respectively. The results are similar to the original first stage probit regression (Columns 1 and 2) and our two exclusion restrictions are still highly statistically significant. CEO resistance decreases significantly the probability of targeting in hostile and non-hostile campaigns. We use the ordered probit model to compute the inverse Mills ratio and include it in the second stage career outcome regressions.

The specification of the career outcome regression is very similar to Equation (8), but we replace the target dummy with two dummies for non-hostile and hostile campaigns. We also add interaction terms between the two campaign hostility dummies and the CEO resistance dummy to examine the interplay of hostility on the two sides. Finally, IMR is partitioned across non-targets, hostile, and non-hostile targets. Table 7 shows results for CEO, executive, and board positions in Panels A to C, respectively. Panel D shows results for the directional changes in total compensation. For comparison, the right-hand side of Table 7 (Columns 5 to 8) shows OLS estimates that ignore the first stage and so do not account for endogeneity.

Insert Table 7 about here

Panel A focuses on CEO positions. The OLS results show a strong negative effect of activist hostility (hostile) for CEO positions in public firms in Columns 5 to 7. The coefficients for non-hostile campaigns are also negative and significant, but their magnitude is less than half of the hostile coefficients. The CEO resistance effect is also negative and significant, but of smaller magnitude than for activist hostility (remember that CEO resistance is a dummy variable). Finally, the two interaction terms are very small and statistically insignificant. In short, the OLS results suggest a strong negative effect of activist hostility on CEOs keeping their CEO positions in the current and other publicly listed firms. CEO resistance has a smaller negative effect and we have no evidence of strategic interplay between CEO resistance and campaign hostility. The last column for CEO positions in private firms shows only one significant coefficient, we have a positive effect in non-hostile campaigns.

This picture changes when we control for endogeneity. Columns 1 to 4 show positive coefficients for non-hostile campaigns and negative coefficients for hostile campaigns, but they are all insignificant, mostly due to large standard errors. We still should take into account the interaction terms with CEO resistance. CEO resistance exaggerates activists' hostility; the interaction term for non-hostile campaigns is positive, while the interaction term for hostile campaigns is negative. However, the coefficients are insignificant. The F-statistic at the bottom of the panel shows significance levels for the sum of the coefficients on campaign hostility and their corresponding interaction term with CEO resistance. They are all insignificant.

The coefficient for CEO resistance (on its own) is negative and significant suggesting that it lowers chances of CEOs keeping their jobs even without activist campaigns. However, the total effect of CEO resistance in non-hostile campaigns is halved and becomes statistically insignificant. The positive and significant IMR coefficient for non-hostile campaigns suggests a positive correlation of error terms between the first stage and outcome regressions. An unobserved characteristic, for example CEO quality, increases the odds of non-hostile campaigns and at the same time increases the chances of CEOs keeping their CEO position. Overall, our results suggest that neither non-hostile nor hostile activism has a direct significant impact on keeping the current or any CEO position for incumbent CEOs and CEO resistance does not affect this relationship significantly.

Panel B shows results for executive positions. They are largely identical to Panel A, but the positive interaction term between CEO resistance and non-hostile campaigns is now larger and significant in Columns 1 and 3. This means that the chances of keeping an executive position in the targeted firm, or in any public firm, for CEOs with high resistance are significantly improved when the campaign turns non-hostile. The interaction term is insignificant in Column 2 for executive positions in any firms, but the joint significance F-test at the bottom of the panel shows that the overall effect of non-hostile campaigns with high CEO resistance is significantly positive. The coefficients for hostile campaigns do not change from Panel A and remain statistically insignificant.

Altogether, these findings indicate that CEO resistance pays off for targeted CEOs, but only in case when activists do not counter-resist; their career prospects improve significantly. A plausible interpretation is that CEOs, through their interactions with non-hostile activists, may acquire special skills on how to reduce frictions and effectively negotiate with activists, and more of the potential gains are realised in the group of CEOs who are inclined to resist due to their higher bargaining power. Alternatively, if the CEO resistance dummy measures a strategic reaction to activism, the positive interaction term suggests that the CEOs' resistance is betting on activists not pushing back and CEOs being eventually successful in keeping their job by resistance. The fact that this interaction term is significant only in Panel B with executive positions and not in Panel A with CEO positions suggests some concession on the CEO side; they most likely end up with a lower ranked job.

Panel C analyzes CEOs' director positions. We can see a significant disciplinary effect of hostile activism on inside board positions. In particular, the coefficient for hostile is negative and significant in both Column 1 and Column 5, but correcting for endogeneity doubles the coefficient.¹⁶ In economic terms, more than half of the incumbent CEOs (0.61) stop serving on their own boards following hostile activism events. The result parallels the finding in Fos and Tsoutsoura (2014), who document that 56% of the original directors lose their board seats three years after the proxy contest. Moreover, the F-test at the bottom of the panel indicates that the overall effect of hostile campaigns remains significant even when targeted CEOs resist.¹⁷ The coefficient for non-hostile goes from significantly negative in Column 5 to insignificant in Column 1 after correcting for endogeneity. The results in Columns 2 and 6 show that the retributive effects of hostile campaigns do not reach beyond board seats in the targeted companies.

Turning to changes in total CEO pay in Panel D, we can see that neither non-hostile

¹⁶The standard error of the coefficient increases as well, leading to a smaller statistical significance.

¹⁷Panels A and B show that CEOs do not lose their CEO or executive positions, but according to Panel C, they lose a board position. This inconsistency is because CEOs often keep their board positions even after they leave their current CEO positions, but this is not the case for targeted CEOs in hostile campaigns.

nor hostile activism are associated with any directional changes in compensation once we account for endogeneity. Panel B in Table I.2 in the Internet Appendix shows qualitatively similar results for changes in the log of CEO total and inside compensation. We note that the coefficient on ‘CEO resistance \times hostile’ using the alternative measure of inside compensation (Column 2, Panel B of Table I.2 in the Internet Appendix) becomes significantly positive, suggesting that the incremental effect of CEO resistance in hostile campaigns is to increase internal CEO compensation at targeted firms.

To summarize, target CEOs suffer, on average, negative consequences of activism targeting only for inside board positions and only when the activist campaign turns hostile. Further, CEOs who resist have a significantly better chance of keeping executive positions conditional that the activism events do not progress to a hostile form.

5 Hedge fund activism

The literature finds that hedge fund activism is different from other forms of activism (see Brav et al., 2022, for a review). In our sample, hedge fund activism accounts for 49% of campaigns (Table 1). To compare career outcomes for hedge funds versus other activists, we run

$$(9) \quad \Delta W_i = \alpha_0 + \alpha HF_i + X_i \beta + \delta \times \hat{\lambda}_i(Z_i \gamma) + \eta_i,$$

for targeted CEOs only. To control for a selection bias for targeted CEOs, we include $\hat{\lambda}_i(Z_i \gamma)$, which is the inverse Mills ratio constructed from the first-stage ordered probit regression (as in Column 3 of Table I.1 in the Internet Appendix). α determines the additional effect of hedge fund targeting above the effect of other activists. Table 8 shows the results. To account for activists’ hostility, we partition the sample into hostile (Columns 1 to 4) and non-hostile campaigns (Columns 5 to 8). For each outcome variable, we include a specification with CEO resistance on its own and then also include interaction terms between CEO resistance and the hedge fund dummy. We end up with 8 panels A to H.

Insert Table 8 about here

The main conclusion is that hedge fund campaigns have more severe consequences on CEO careers than other activist campaigns. The coefficients on the hedge fund dummy for CEO and executive positions are negative and statistically significant in Panels A and C. CEOs facing hedge fund campaigns are more likely to lose their current CEO and executive positions and less likely to replace them with equivalent positions in other companies, when compared to targets of other activists. The results hold for both non-hostile and hostile deals. Regarding board positions (Panel E), the hedge fund effect is negative for inside board positions, but significant only in non-hostile campaigns. The coefficients for changes in outside board positions are insignificant across different campaigns, and the result is similar for both public and private firms. In Panel G, we do not observe any significantly different compensation changes between hedge fund and other activist targets or across campaign hostility.

Panels B, D, F and H include an additional interaction term between the hedge fund and CEO resistance dummies. We can see that CEOs are able to mitigate the negative impact of hedge fund targeting through resistance. Specifically, the hedge fund dummy coefficients in Panels B and D (CEO and executive positions) remain negative while the interaction terms with the CEO resistance dummy are positive (significant in only non-hostile deals). The F-statistics for the overall hedge fund targeting effect for resistant CEOs (hedge fund + CEO resistance \times hedge fund) are all statistically insignificant. Thus, hedge funds affect CEO job prospects more negatively only for low resistant CEOs.

Turning to board seats in Panel F, the hedge fund dummy is negative and significant for inside board seats in both non-hostile and hostile campaigns. The interaction effects are positive and the F-statistics are insignificant (Columns 1 and 5), indicating that the hedge fund effect is, if anything, weaker for CEOs who resist. Further, we find no evidence that CEOs targeted by hedge funds suffer greater loss of outside board seats, or seats at public or private firms, as suggested by the insignificant hedge fund coefficients and F-statistics in Columns 2 to 4 and 6 to 8.

Panel H focusing on CEO pay does not show any significant results except the significant F-test in Column 3 for outside pay. Hence, there is no evidence that hedge fund targets experience larger compensation changes but when it comes to the outside pay in non-hostile deals.

In summary, CEO career consequences of hedge fund activism are on average significantly more negative (compared with other activist activism)¹⁸. Following hedge fund targeting, CEOs lose their executive and inside board positions more often, even in non-hostile campaigns with generally more compromises and negotiations. However, target CEOs' resistance could effectively dampen the negative career impact of hedge fund activism in both hostile and non-hostile campaigns. These results have important implications for understanding the interactions between targets and activists. Studies of shareholder activism often argue that activist hedge funds are effective at imposing changes at target companies. Our results highlight the buffer effect of target CEO resistance on hedge fund activism outcomes.

6 Conclusions

The impact of shareholder activism is a widely examined topic. Many studies explore consequences of shareholder activism for target firms, but the consequences for the involved CEOs remain underexplored. Using data on shareholder activism campaigns against US public firms during 2006–2018, this study follows CEOs' internal and external career prospects, in public and private firms, and facing all forms of activism. We extend and complement Brav et al. (2008) and Fos and Tsoutsoura (2014).

To account for endogeneity between activism targeting and CEO career outcomes, we use the control function approach and show that targeted CEOs do not fare worse in the labor market than non-targeted CEOs. It is not that activists shareholders are not responsible for higher probability of CEOs losing their CEO and executive positions,

¹⁸Nevertheless, we note that when we compare the career outcomes of non-hostile hedge fund targets to non-targets, we find little to no statistical differences between the two groups (results not reported).

but the fired CEOs would have been replaced even without activists' intervention. Our analysis highlights that the endogenous treatment effects are significant because error terms from the targeting regression correlate negatively with changes in career variables for targeted CEOs. The only negative CEO career consequence that survives controlling for endogeneity is the loss of inside board positions when activists turn hostile. CEO resistance is beneficial for CEOs but only when activists do not eventually go hostile or with hedge fund activism. Our results are important for understanding CEO labor markets in the presence of activism.

Appendix A Activist Identities

Activist Identity	Definition
Corporation	Public or private company. A corporation is classified as an activist when it is attempting to take over another company whether via a proxy fight or hostile tender offer (e.g., Oracle Corporation campaign to takeover PeopleSoft, Inc.).
Hedge fund company	A fund that uses derivative securities and is extremely risky. Typically, these companies are very secretive about their investments. Includes funds that use puts, calls, margins, and shorts, often as “hedges” to reduce risk (e.g., Soros Fund Management). Institution types (i.e., Hedge Fund Company, Investment Adviser, Mutual Fund Manager, and Other Institutions) are assigned by FactSet LionShares.
Individual	The activist is an individual or family.
Investment adviser	If an investment firm does not have the majority of its investments in mutual funds and is not a subsidiary of a bank, brokerage firm, or insurance company, then the firm is considered an Investment Advisor. An Investment Advisor provides investment advice and manages a portfolio of securities (e.g., Franklin Mutual Advisors). Institution types (i.e., Hedge Fund Company, Investment Adviser, Mutual Fund Manager, and Other Institutions) are assigned by FactSet LionShares.
Labor union	The activist is a labor union including labor union pension funds (e.g., The Service Employees International Union).
Mutual fund manager	An investment firm with the majority of its investments in mutual funds. A mutual fund raises money from shareholders and reinvests the money in securities (e.g., BWD Rensburg Unit Trust Managers Ltd). Institution types (i.e., Hedge Fund Company, Investment Adviser, Mutual Fund Manager, and Other Institutions) are assigned by FactSet LionShares.
Public pension funds	A fund established by a state or local government to pay benefits of retired workers (e.g., The California Public Employees Retirement System).
Religious group	The activist is a religious organization (e.g., Interfaith Center on Corporate Responsibility).
Named stockholder group	The name adopted by the activist group for the specific activist campaign (e.g., The Committee for Concerned Cyberonics, Inc. Shareholders).
Other institutions	Other institutional investors not already categorized. Includes Arbitrage, Bank Management Division, Broker, Broker/Investment Bank Asset Management, Fund Distributor, Foundation/Endowment, Holding Company, Insurance Company, Insurance Management Division, Corporate Pension Fund, Private Banking Portfolio, and Venture Capital Firms. Institution types are assigned by FactSet LionShares.
Other stake holders	Other non-individual and non-institutional investor entities such as ESOPs, venture capital, private equity firms and other investment firms not categorized as an institution by FactSet LionShares.

Appendix B Variable Definitions

Variable	Definition
Career outcomes	
Keep current CEO position	Variable showing changes in current CEO position from 1 year before activism (placebo activism) until 3 years after. It takes 3 values: -1 for losing current CEO position, 0 for keeping current CEO position, and 1 for gaining current CEO position if not holding it at year -1 .
Keep any CEO position	Variable that shows changes in any CEO position (including current and other firms) from 1 year before activism (placebo activism) until 3 years after. It takes 3 values: -1 for losing any CEO position, 0 for keeping any CEO position, and 1 for gaining any CEO position if not holding it at year -1 .
Keep any public CEO position	Variable that shows changes in any CEO position (including current and other firms) in public firms from 1 year before activism (placebo activism) until 3 years after. It takes 3 values: -1 for losing any public CEO position, 0 for keeping any public CEO position, and 1 for gaining any CEO position if not holding it at year -1 .
Keep any private CEO position	Variable that shows changes in any CEO position (including current and other firms) in private firms from 1 year before activism (placebo activism) until 3 years after. It takes 3 values: -1 for losing any private CEO position, 0 for keeping any private CEO position, and 1 for gaining any private CEO position if not holding it at year -1 .
Keep current executive position	Variable that shows changes in current executive position from 1 year before activism (placebo activism) until 3 years after. This is a somewhat wider variable as it focuses on executive rather than CEO positions. It takes 3 values: -1 for losing an executive position with the current employer, 0 for keeping an executive position with the current employer, and 1 for gaining an executive position with the employer at year 3 relatively to year -1 .
Keep any executive position	Variable that shows changes in executive positions in any firm from 1 year before activism (placebo activism) until 3 years after. Somewhat wider variable which focuses on executive rather than CEO positions. It takes 3 values: -1 for losing any executive position, 0 for keeping any executive position, and 1 for gaining any executive position at year 3 relatively to year -1 .
Keep any public executive position	Variable that shows changes in executive positions with public firms from 1 year before activism (placebo activism) until 3 years after. This is a somewhat wider variable as it focuses on executive rather than CEO positions. It takes 3 values: -1 for losing any public executive position, 0 for keeping any public executive position, and 1 for gaining any public executive position at year 3 relatively to year -1 .
Keep any private executive position	Variable that shows changes in executive positions with private firms from 1 year before activism (placebo activism) until 3 years after. This is a somewhat wider variable as it focuses on executive rather than CEO positions. It takes 3 values: -1 for losing any private executive position, 0 for keeping any private executive position, and 1 for gaining any private executive position at year 3 relatively to year -1 .
Keep inside directorship	Variable that shows changes in current (inside) board position from 1 year before activism (placebo activism) until 3 years after. It takes 3 values: -1 for losing inside board position, 0 for keeping inside board position, and 1 for gaining inside board position at year 3 relatively to year -1 .

continued on next page

Variable	Definition
Change in outside directorships	Change in the number of CEO outside directorships across publicly listed and private firms, from 1 year before activism (placebo activism) until 3 years after.
Change in public (private) directorships	Change in the number of CEO outside directorships at publicly listed (private) firms, from 1 year before activism (placebo activism) until 3 years after.
Change in total pay	Variable showing sign of total pay change from 1 year before activism (placebo activism) until 3 years after. It takes 3 values: -1 for a decrease in total pay, 0 for keeping total pay unchanged, and 1 for an increase in total pay relatively to year -1 . Total compensation is the sum of pay for all executive and director jobs, including all individual pay components in a given year.
Change in inside pay	Variable that shows sign of pay change at the focal firm from 1 year before activism (placebo activism) until 3 years after. It takes three values: -1 for a decrease in pay in the focal firm, 0 for no change in pay in the focal firm, and 1 for an increase in pay in the focal firm relatively to year -1 .
Change in outside pay	Variable that shows sign of pay change from outside the focal firm from 1 year before activism (placebo activism) until 3 years after. It takes 3 values: -1 for a decrease in pay from outside the focal firm, 0 for no change in pay from outside the focal firm, and 1 for an increase in pay from outside the focal firm relatively to year -1 .
Change in $\ln(\text{total pay})$	Change in the log of total compensation from 1 year before activism (placebo activism) until 3 years after, conditional on having non-zero pay at year -1 or $+3$, and expressed as change per year. Total compensation is the sum of pay for all executive and director jobs, including all individual pay components.
Change in $\ln(\text{inside pay})$	Change in the log of total CEO compensation at the focal firm from 1 year before activism (placebo activism) year until 3 years after, conditional on keeping the CEO or board position, and expressed as change per year.
CEO characteristics	
Female CEO	Dummy variable equal to 1 if the firm is run by a female CEO and 0 otherwise.
CEO age	Age of the CEO in years.
Retirement-age CEO	Dummy variable equal to 1 if the CEO is older than 70 and 0 otherwise.
CEO tenure	Number of years since the CEO started their CEO position in the focal firm.
CEO resistance	Dummy variable equal to 1 for CEOs with resistance index above the sample median and 0 otherwise. Resistance index aggregates the first 2 components from a principal component analysis on 5 variables: CEO tenure, CEO-chair duality, retirement-age CEO, cash holdings, and institutional ownership concentration; weighting each component by its contribution to the total variance of the 5 variables.
CEO education	Number of CEO's qualifications at undergraduate level and above.
CEO board experience	Number of boards of public or private firms that the CEO has ever served on.
General ability index	The first factor in principal component analysis of 5 variables: number of positions, number of firms, number of industries, previous CEO experience dummy, and conglomerate experience dummy (Custódio et al., 2013).
Firm characteristics	
Staggered board	Dummy variable equal to 1 if a company's board is staggered and 0 otherwise.
Change in MF ownership	Annual average of quarterly change in ownership of all mutual funds.
Illiquidity	Daily Amihud illiquidity ratio – daily ratio of absolute value of stock returns to dollar volume, averaged over a fiscal year and multiplied by 1 million.

Variable	Definition
Firm size	Natural logarithm of the market value of equity.
Return on assets	Earnings before interest, taxes, depreciation, and amortization, divided by lagged total assets.
Stock return	12-month buy-and-hold return in excess of value-weighted market return.
Board size	Number of directors on board.
Board reputation	Dummy variable equal to 1 for corporate boards with reputation concerns above the sample median and 0 otherwise. Board reputation concerns is the first component in a principal component analysis for 3 variables: average number of directorships held by incumbent outside board members, fraction of young outside directors, and analyst coverage (Bebchuk et al., 2020).
Independent directors	Fraction of independent directors on board.
CEO-chair duality	Dummy variable equal to 1 if the CEO is also the chairman of the board.
Institutional ownership	Sum of the holdings of all institutions (excluding the ownership stakes held by the 5 most and 5 least pro-dissident mutual fund families) in a firm's stock divided by market capitalization at the end of each calendar year.
Pro-dissident (pro-management) MF ownership	Ownership stake held by the 5 most (least) pro-dissident mutual fund families based on their support for management versus dissidents in proxy votes as reported in Brav et al. (2021).
Analyst coverage	Number of analyst who made forecasts about firm's earnings in each year.
Cash-to-asset ratio	Cash scaled by average total assets.
Institutional own. concentration	Herfindahl-Hirschman index applied to fractions of the firms shares held by institutional investors.
Outside directors' directorships	Average number of directorships held by outside directors across publicly listed and private firms.
Fraction young outside directors	Fraction of outside directors on board below 70 years of age.
Activism campaign characteristics	
Target	Dummy variable equal to 1 if the CEO's firm is targeted by shareholder activists in a given year and 0 otherwise.
Hostile campaign	Dummy variable equal to 1 for campaigns involving threats or launches of proxy contests, takeovers, lawsuits, or advocations for replacement of management/directors and 0 otherwise.
Non-hostile campaign	Complement to the hostile campaign.
Proxy fight or threat of proxy fight	Campaigns where activists solicit the proxy or written consent of fellow stockholders in support of a resolution they are advancing; usually involves election of dissident nominees to the board. Proxy fight threat involves activists threatening to begin a proxy solicitation. As soon as activists publicly disclose a formal notice to the company that they intend to solicit proxies from stockholders, it is considered an actual solicitation.
Tactic category	Category 1: activists withhold vote for directors or seek board seats without launching or threatening to launch proxy contest. Category 2: activists make formal shareholder proposals, issue open letters to board, management, or stockholders, call a special meeting, take action by written consent. Category 3: activists launch or threaten to launch a proxy fight, issue an acquisition offer, sue the company.

References

- Ahmadi, A., A. Kecskés, R. Michaely, and P.-A. Nguyen (2024). Producing AI innovation and its value implications. EFA 2024 Working Paper.
- Amihud, Y. (2002). Illiquidity and stock returns: Cross-section and time-series effects. *Journal of Financial Markets* 5(1), 31–56.
- Anderson, T. W. and H. Rubin (1949). Estimation of the parameters of a single equation in a complete system of stochastic equations. *Annals of Mathematical Statistics* 20(1), 46–63.
- Basmann, R. L. (1960). On finite sample distributions of generalized classical linear identifiability test statistics. *Journal of the American Statistical Association* 55(292), 650–659.
- Bates, T. W., D. A. Becher, and M. L. Lemmon (2008). Board classification and managerial entrenchment: Evidence from the market for corporate control. *Journal of Financial Economics* 87(3), 656–677.
- Bebchuk, L. A., A. Brav, W. Jiang, and T. Keusch (2020). Dancing with activists. *Journal of Financial Economics* 137(1), 1–41.
- Becht, M., J. Franks, J. Grant, and H. F. Wagner (2017). Returns to hedge fund activism: An international study. *Review of Financial Studies* 30(9), 2933–2971.
- Becht, M., J. Franks, C. Mayer, and S. Rossi (2009). Returns to shareholder activism: Evidence from a clinical study of the Hermes UK Focus Fund. *Review of Financial Studies* 22(8), 3093–3129.
- Boyson, N. M. and P. Pichler (2019). Hostile resistance to hedge fund activism. *Review of Financial Studies* 32(2), 771–817.
- Brav, A., W. Jiang, and R. Li (2022). Governance by persuasion: Hedge fund activism and market-based shareholder influence. ECGI Finance Working Paper N 797/2021.
- Brav, A., W. Jiang, T. Li, and J. Pinnington (2021). Picking friends before picking (proxy) fights: How mutual fund voting shapes proxy contests. ECGI Finance Working Paper N. 601/2019.
- Brav, A., W. Jiang, F. Partnoy, and R. Thomas (2008). Hedge fund activism, corporate governance, and firm performance. *Journal of Finance* 63(4), 1729–1775.
- Carleton, W. T., J. M. Nelson, and M. S. Weisbach (1998). The influence of institutions on corporate governance through private negotiations: Evidence from TIAA-CREF. *Journal of Finance* 53(4), 1335–1362.
- Chaney, T., D. Sraer, and D. Thesmar (2012). The collateral channel: How real estate shocks affect corporate investment. *American Economic Review* 102, 2381–2409.
- Child, J. (1974). Managerial and organizational factors associated with company performance part I. *Journal of Management Studies* 11(3), 175–189.

- Custódio, C., M. A. Ferreira, and P. Matos (2013). Generalists versus specialists: Lifetime work experience and chief executive officer pay. *Journal of Financial Economics* 108(2), 471–492.
- Cziraki, P. and D. Jenter (2022). The market for CEOs. ECGI Finance Working Paper No 831/2022.
- Dimson, E., O. Karakaş, and X. Li (2015). Active ownership. *Review of Financial Studies* 28(12), 3225–3268.
- Dodd, P. and J. B. Warner (1983). On corporate governance: A study of proxy contests. *Journal of Financial Economics* 11(1-4), 401–438.
- Eckbo, B. E., K. S. Thorburn, and W. Wang (2016). How costly is corporate bankruptcy for the CEO? *Journal of Financial Economics* 121(1), 210–229.
- Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy* 88(2), 288–307.
- Fos, V. and M. Tsoutsoura (2014). Shareholder democracy in play: Career consequences of proxy contests. *Journal of Financial Economics* 114(2), 316–340.
- Gantchev, N. (2013). The costs of shareholder activism: Evidence from a sequential decision model. *Journal of Financial Economics* 107(3), 610–631.
- Gantchev, N. and C. Jotikasthira (2018). Institutional trading and hedge fund activism. *Management Science* 64(6), 2930–2950.
- Ge, W., L. Tanlu, and J. L. Zhang (2016). What are the consequences of board destaggering? *Review of Accounting Studies* 21, 808–858.
- Gompers, P., S. Kaplan, and V. Mukharlyamov (2023). The market for CEOs: Evidence from private equity. NBER Working Paper No 30899.
- Goyal, V. K. and C. W. Park (2002). Board leadership structure and CEO turnover. *Journal of Corporate Finance* 8(1), 49–66.
- Greenwood, R. and M. Schor (2009). Investor activism and takeovers. *Journal of Financial Economics* 92(3), 362–375.
- Grossman, S. J. and O. D. Hart (1980). Takeover bids, the free-rider problem, and the theory of the corporation. *Bell Journal of Economics* 11, 42–64.
- Guo, S. and M. W. Fraser (2014). *Propensity score analysis: Statistical methods and applications*, Volume 11. SAGE publications.
- Hambrick, D. C. and P. A. Mason (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review* 9(2), 193–206.
- Heckman, J. J. (1979). Sample selection bias as a specification error. *Econometrica: Journal of the Econometric Society* 47(1), 153–161.

- Jenter, D. and K. Lewellen (2015). Ceo preferences and acquisitions. *Journal of Finance* 70(6), 2813–2852.
- Kaplan, S. N. and D. Reishus (1990). Outside directorships and corporate performance. *Journal of Financial Economics* 27(2), 389–410.
- Karpoff, J. M., P. H. Malatesta, and R. A. Walkling (1996). Corporate governance and shareholder initiatives: Empirical evidence. *Journal of Financial Economics* 42(3), 365–395.
- Klein, A. and E. Zur (2009). Entrepreneurial shareholder activism: Hedge funds and other private investors. *Journal of Finance* 64(1), 187–229.
- Masulis, R. W., C. Wang, and F. Xie (2007). Corporate governance and acquirer returns. *Journal of Finance* 62(4), 1851–1889.
- Proffitt Jr, W. T. and A. Spicer (2006). Shaping the shareholder activism agenda: Institutional investors and global social issues. *Strategic Organization* 4(2), 165–190.
- Rutherford, R. C., T. M. Springer, and A. Yavas (2005). Conflicts between principals and agents: Evidence from residential brokerage. *Journal of Financial Economics* 76(3), 627–665.
- Salancik, G. R. and J. R. Meindl (1984). Corporate attributions as strategic illusions of management control. *Administrative Science Quarterly* 29, 238–254.
- Serfling, M. (2014). CEO age and the riskiness of corporate policies. *Journal of Corporate Finance* 25, 251–273.
- Useem, M. (1996). *Investor capitalism: How money managers are changing the face of corporate America*. Basic Books (AZ).
- Veiga, J. F. (1983). Mobility influences during managerial career stages. *Academy of Management Journal* 26(1), 64–85.
- Vella, F. and M. Verbeek (1999). Estimating and interpreting models with endogenous treatment effects. *Journal of Business & Economic Statistics* 17(4), 473–478.
- Wahal, S., K. W. Wiles, and M. Zenner (1995). Who opts out of state antitakeover protection? The case of Pennsylvania’s SB 1310. *Financial Management* 24(3), 22–39.

Tables

Table 1. Campaign characteristics

This table shows distributions of campaigns by industry, activist identity, activist objective, and activist tactic in Panels A to D, respectively. Panel E lists frequencies of active hedge funds versus other activists, separately for hostile and non-hostile activism. Hostile campaigns include threats or launches of proxy contests, takeovers, lawsuits, and cases where activists advocate for replacement of management/directors. Panel F lists the frequencies in which each CEO is targeted by shareholder activists. The sample covers 2,207 unique target CEOs and 3,799 activist campaigns between 2006 and 2018.

	(1)	(2)
	Number of observations	Percent of total
<i>Panel A: Industries</i>		
Consumer nondurables	174	5
Consumer durables	93	2
Manufacturing	248	7
Oil, gas, and coal extrac. & products	226	6
Chemicals and allied products	72	2
Business equipment	742	20
Telephone and television transmission	162	4
Utilities	133	4
Wholesale, retail, and some services	449	12
Healthcare, med. equipment, & drugs	369	10
Finance	675	18
Other	456	12
Total	3,799	100
<i>Panel B: Activist identity</i>		
Hedge fund	1,879	49
Investment adviser	559	15
Individual	329	9
Pension fund	242	6
Labor union	177	5
Corporation	100	3
Named stockholder group	54	1
Other institutions	133	4
Mutual fund	26	1
Religious groups	25	1
Other stake holders	580	15
Total	3,799	100
<i>Panel C: Primary objectives</i>		
Board representation	968	25
Board control	190	5
Remove director	19	1
Maximize shareholder value	877	23
Vote against man. proposal	192	5
Vote for stockholder proposal	709	19
Vote against a merger	116	3
Enhance corporate governance	134	4
Hostile acquisition	109	3
Remove officer	21	1
Public short position	94	2
Support dis. group in proxy fight	65	2
Not publicly disclosed	305	8
Total	3,799	100

continued on next page

continued from previous page

	(1)	(2)
	Number of observations	Percent of total
<i>Panel D: Tactic categories</i>		
Category 1 (least hostile):	852	22
Nominate slate of directors	681	18
Withhold vote for directors	179	5
Category 2:	2,220	58
Letter to board/management	1,381	36
Letter to stockholder	893	24
Call special meeting	39	1
Take action by writ. consent	34	1
Propose precatory proposal	695	18
Propose binding proposal	115	3
Category 3 (most hostile):	1,059	28
Threaten proxy fight	202	5
Proxy fight	709	19
Tender offer	33	1
Unsolicited offer	184	5
Hostile offer	75	2
Lawsuit	129	3
Total	3,799	100
<i>Panel E: Activism hostility</i>		
Hostile	1,190	31
Hedge funds	686	58
Non-hedge funds	504	42
Non-hostile	2,609	69
Hedge funds	1,193	46
Non-hedge funds	1,416	54
Total	3,799	100
<i>Panel F: CEOs with multiple campaigns</i>		
1 campaign	1,373	62
2 campaigns	489	22
3 campaigns	174	8
4 campaigns	71	3
5 campaigns	54	2
6 and more campaigns	46	2
Total unique CEOs	2,207	100

Table 2. CEO resistance

This table shows results of the principal component analysis on five CEO and firm characteristics that are likely to affect a firm CEO's resistance decision: CEO tenure, CEO-chair duality, retirement-age CEO, cash-to-asset ratio, and institutional ownership concentration. Columns 1 and 2 show factor loadings, eigenvalues, and proportions of the total variance explained by the two principal components. Variable definitions are provided in Appendix B.

	(1)	(2)
	Component 1	Component 2
CEO tenure	0.641	0.006
CEO-chair duality	0.558	-0.134
Retirement-age CEO	0.506	0.254
Cash-to-asset ratio	-0.140	0.635
Institutional own. concentration	0.043	0.717
Proportion explained	0.326	0.214
Eigenvalue	1.629	1.067

Table 3. Descriptive statistics

This table shows the number of observations, mean, standard deviation, first quartile, median, and third quartile (Columns 1 to 6) for the sample of CEOs and their firms. Columns 7 and 8 show averages across targeted versus non-targeted CEOs with the significance of the difference reported in Column 8. The sample covers 2,207 unique target CEOs and 3,799 activist campaigns between 2006 and 2018. See Appendix B for variable definitions. ^a, ^b, and ^c mean significance at the 1-, 5-, and 10-percent level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	# obs.	Mean	Std.d.	Q1	Median	Q3	Target	Non-tar.
Dependent variables:								
Keep current CEO position	30,246	-0.34	0.51	-1.00	0.00	0.00	-0.48	-0.33 ^a
Keep any CEO position	30,246	-0.25	0.47	-1.00	0.00	0.00	-0.34	-0.24 ^a
Keep any public CEO pos.	30,246	-0.33	0.50	-1.00	0.00	0.00	-0.45	-0.31 ^a
Keep any private CEO pos.	30,246	0.03	0.39	0.00	0.00	0.00	0.06	0.02 ^a
Keep current executive position	30,246	-0.35	0.49	-1.00	0.00	0.00	-0.49	-0.33 ^a
Keep any executive position	30,246	-0.23	0.43	0.00	0.00	0.00	-0.29	-0.22 ^a
Keep any public executive pos.	30,246	-0.33	0.48	-1.00	0.00	0.00	-0.45	-0.31 ^a
Keep any private executive pos.	30,246	0.04	0.42	0.00	0.00	0.00	0.08	0.04 ^a
Keep current inside directorship	30,246	-0.27	0.47	-1.00	0.00	0.00	-0.43	-0.23 ^a
Change in outside directorships	30,246	0.23	1.03	0.00	0.00	1.00	0.25	0.23
Change in pub. directorships	30,246	0.12	0.56	0.00	0.00	0.00	0.11	0.12
Change in priv. directorships	30,246	0.12	0.76	0.00	0.00	0.00	0.14	0.12
Change in total pay	4,756	0.18	0.98	-1.00	1.00	1.00	0.10	0.19 ^b
Change in inside pay	4,479	0.24	0.97	-1.00	1.00	1.00	0.17	0.25 ^c
Change in outside pay	4,756	0.20	0.62	0.00	0.00	1.00	0.20	0.20
Change in ln(total pay)	4,625	-0.02	0.37	-0.12	0.04	0.16	-0.07	-0.01 ^a
Change in ln(inside pay)	4,293	0.02	0.31	-0.09	0.05	0.17	-0.01	0.02 ^b
Explanatory variables:								
Target	30,246	0.11	0.31	0.00	0.00	0.00	1.00	0.00
Staggered board	30,246	0.51	0.50	0.00	1.00	1.00	0.45	0.52 ^a
Change in MF own. x illiquidity	30,246	0.14	0.64	0.00	0.00	0.02	0.14	0.14
CEO resistance	30,246	0.56	0.50	0.00	1.00	1.00	0.51	0.57 ^a
Female CEO	30,246	0.03	0.18	0.00	0.00	0.00	0.05	0.03 ^a
CEO age	30,246	55.82	7.64	51.00	56.00	61.00	56.00	55.80
CEO tenure	30,246	9.31	8.92	2.60	6.40	13.30	8.60	9.39 ^a
CEO education	30,246	1.87	1.08	1.00	2.00	2.00	1.91	1.86 ^b
CEO board experience	30,246	4.28	3.61	2.00	3.00	6.00	4.60	4.24 ^a
General ability index	30,246	-0.00	1.00	-0.72	-0.16	0.54	0.24	-0.03 ^a
Firm size	30,246	6.37	2.02	4.92	6.35	7.72	6.96	6.30 ^a
Return on assets	30,246	0.06	0.21	0.02	0.09	0.16	0.08	0.06 ^a
Stock return	30,246	0.03	0.48	-0.24	-0.03	0.20	-0.02	0.04 ^a
Analyst coverage	30,246	6.54	6.89	1.00	4.00	9.00	9.02	6.24 ^a
Board size	30,246	8.63	2.49	7.00	8.00	10.00	8.87	8.60 ^a
Board reputation	30,246	0.50	0.50	0.00	1.00	1.00	0.57	0.50 ^a
Independent directors	30,246	0.76	0.12	0.67	0.80	0.88	0.78	0.76 ^a
CEO-chair duality	30,246	0.43	0.49	0.00	0.00	1.00	0.45	0.42 ^a
Institutional ownership	30,246	0.55	0.31	0.28	0.62	0.82	0.59	0.54 ^a
Pro-dissident MF own. (%)	30,246	0.32	0.66	0.00	0.02	0.30	0.36	0.32 ^a
Pro-management MF own. (%)	30,246	3.90	3.43	0.96	3.16	6.04	4.58	3.81 ^a
Retirement-age CEO	30,246	0.05	0.21	0.00	0.00	0.00	0.05	0.04
Cash-to-asset ratio	30,246	0.19	0.23	0.03	0.10	0.27	0.18	0.19 ^a
Institutional own. concentration	30,246	0.11	0.13	0.03	0.05	0.12	0.08	0.11 ^a
Outside directors' directorships	30,246	2.91	1.17	2.12	2.70	3.50	3.00	2.90 ^a
Fraction young outside directors	30,246	0.85	0.15	0.75	0.88	1.00	0.85	0.85

Table 4. Changes in CEO and executive positions around shareholder activism

Panels A and B report in Columns 1 to 4 estimates from the specification: $\Delta W_i = \alpha_0 + \alpha T_i + X_i\beta + \delta_1 T_i \times \hat{\lambda}_i(Z_i\gamma) + \delta_0(1 - T_i) \times \hat{\lambda}_i(Z_i\gamma) + \eta_i$. The model is the second stage of a two-step procedure as in Vella and Verbeek (1999) that accounts for endogenous treatment effects of targeting. ΔW stands for CEO positions in Panel A and executive positions in Panel B. $\hat{\lambda}$ is the inverse Mills ratio (IMR) derived from the first stage of activism targeting reported in Table I.1 in the Internet Appendix. T is the target dummy. Columns 5 to 8 report estimates of an OLS specification: $\Delta W_i = \alpha_0 + \alpha T_i + X_i\beta + \eta_i$. Columns 1 and 5 focus on the current CEO positions in the firms as of t_0 , Columns 2 and 6 include also positions outside of the current firms, and Columns 3 and 7 (4 and 8) split any positions into positions in public (private) firms. ρ_0 and ρ_1 are the correlation coefficient between error terms in Equations (2) and (4) and Equations (3) and (4), respectively. χ^2 is the Wald Chi-Square value testing the null hypothesis that ρ_0 and ρ_1 are jointly zero. All specifications include the same control variables which are not reported in Panel B. All variables are defined in Appendix B. Standard errors are clustered by firm and year, and displayed in parentheses. ^a, ^b, and ^c mean significance at the 1-, 5-, and 10-percent level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Control function				OLS			
	Current	Any	Public	Private	Current	Any	Public	Private
<i>Panel A: CEO positions</i>								
Target	0.115 (0.170)	0.155 (0.138)	0.111 (0.163)	0.098 (0.084)	-0.151 ^a (0.015)	-0.093 ^a (0.013)	-0.137 ^a (0.014)	0.029 ^b (0.013)
IMR x non-target	0.060 (0.169)	-0.033 (0.139)	0.058 (0.161)	-0.083 (0.099)				
IMR x target	-0.169 ^c (0.080)	-0.145 ^b (0.065)	-0.159 ^c (0.078)	-0.030 (0.039)				
CEO resistance	-0.040 ^a (0.012)	-0.029 ^b (0.013)	-0.044 ^a (0.012)	0.007 (0.013)	-0.038 ^a (0.010)	-0.031 ^a (0.010)	-0.042 ^a (0.010)	0.004 (0.011)
Female CEO	-0.003 (0.021)	-0.013 (0.024)	-0.007 (0.022)	-0.041 ^c (0.019)	0.000 (0.018)	-0.006 (0.020)	-0.004 (0.018)	-0.034 ^c (0.016)
CEO age	-0.081 ^a (0.005)	-0.102 ^a (0.005)	-0.086 ^a (0.005)	-0.054 ^a (0.004)	-0.081 ^a (0.005)	-0.102 ^a (0.005)	-0.086 ^a (0.005)	-0.053 ^a (0.004)
CEO tenure	0.048 ^a (0.005)	0.035 ^a (0.005)	0.047 ^a (0.005)	0.014 ^a (0.004)	0.048 ^a (0.005)	0.035 ^a (0.005)	0.047 ^a (0.005)	0.014 ^a (0.004)
CEO education	0.006 (0.005)	0.007 ^c (0.004)	0.006 (0.005)	0.006 ^b (0.003)	0.006 (0.005)	0.007 ^c (0.004)	0.006 (0.005)	0.006 ^b (0.003)
CEO board experience	-0.006 (0.005)	0.003 (0.005)	-0.004 (0.005)	-0.016 ^a (0.004)	-0.006 (0.005)	0.003 (0.005)	-0.004 (0.005)	-0.016 ^a (0.004)
General ability index	-0.019 ^a (0.006)	-0.011 ^c (0.006)	-0.011 ^c (0.006)	0.023 ^a (0.004)	-0.019 ^a (0.004)	-0.010 ^c (0.005)	-0.011 ^b (0.005)	0.024 ^a (0.004)
Firm size	0.059 ^a (0.008)	0.018 ^b (0.008)	0.054 ^a (0.008)	-0.032 ^a (0.008)	0.061 ^a (0.008)	0.020 ^b (0.008)	0.056 ^a (0.008)	-0.032 ^a (0.008)
Return on assets	0.011 (0.007)	0.002 (0.005)	0.010 (0.007)	-0.013 ^a (0.004)	0.010 (0.007)	0.001 (0.005)	0.010 (0.007)	-0.013 ^a (0.004)
Stock return	0.011 ^b (0.005)	0.010 ^c (0.005)	0.011 ^b (0.005)	0.005 (0.004)	0.011 ^a (0.004)	0.009 ^c (0.004)	0.011 ^b (0.004)	0.003 (0.003)
Analyst coverage	-0.005 (0.012)	-0.002 (0.009)	-0.003 (0.011)	0.009 (0.007)	-0.003 (0.007)	0.004 (0.006)	-0.001 (0.007)	0.013 ^b (0.005)
Board size	-0.002 (0.006)	-0.004 (0.005)	-0.003 (0.005)	-0.014 ^a (0.004)	-0.001 (0.006)	-0.004 (0.005)	-0.003 (0.005)	-0.014 ^a (0.004)
Independent directors	-0.010 ^c (0.005)	-0.011 ^a (0.004)	-0.009 ^c (0.004)	-0.007 (0.006)	-0.009 ^b (0.004)	-0.010 ^b (0.003)	-0.009 ^b (0.004)	-0.006 (0.006)
Board reputation	-0.049 ^a (0.011)	-0.024 ^b (0.010)	-0.047 ^a (0.011)	0.016 (0.010)	-0.050 ^a (0.008)	-0.027 ^a (0.008)	-0.049 ^a (0.008)	0.013 (0.009)

continued on next page

continued from previous page

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Control function				OLS			
	Current	Any	Public	Private	Current	Any	Public	Private
CEO-chair duality	-0.022 (0.013)	-0.025 ^c (0.013)	-0.022 (0.013)	-0.003 (0.012)	-0.023 ^c (0.011)	-0.023 ^b (0.010)	-0.023 ^c (0.011)	0.000 (0.010)
Institutional ownership	-0.018 ^b (0.006)	-0.012 ^c (0.006)	-0.016 ^b (0.006)	0.002 (0.004)	-0.020 ^a (0.006)	-0.014 ^b (0.006)	-0.018 ^b (0.006)	0.002 (0.004)
Pro-dissident MF ownership	0.001 (0.005)	-0.000 (0.004)	-0.000 (0.004)	0.002 (0.004)	0.000 (0.005)	-0.000 (0.004)	-0.001 (0.004)	0.002 (0.004)
Pro-management MF ownership	0.012 (0.007)	0.005 (0.006)	0.009 (0.007)	0.008 (0.005)	0.012 (0.007)	0.004 (0.006)	0.009 (0.008)	0.007 (0.005)
Constant	-0.363 ^a (0.036)	-0.296 ^a (0.033)	-0.353 ^a (0.037)	0.052 ^c (0.025)	-0.373 ^a (0.023)	-0.291 ^a (0.021)	-0.363 ^a (0.022)	0.066 ^a (0.016)
Adjusted R^2	0.053	0.051	0.052	0.075	0.052	0.051	0.052	0.075
# observations	30,246	30,246	30,246	30,246	30,246	30,246	30,246	30,246
ρ_0	0.121	-0.074	0.120	-0.220				
ρ_1	-0.312	-0.280	-0.295	-0.071				
χ^2	29.271 ^a	16.564 ^a	26.839 ^a	0.664				
Panel B: Executive positions								
Target	0.070 (0.169)	0.133 (0.122)	0.073 (0.167)	0.124 (0.101)	-0.157 ^a (0.014)	-0.065 ^a (0.012)	-0.136 ^a (0.014)	0.040 ^b (0.013)
IMR x non-target	0.077 (0.161)	-0.028 (0.148)	0.078 (0.159)	-0.127 (0.109)				
IMR x target	-0.149 ^c (0.080)	-0.115 ^c (0.056)	-0.138 (0.080)	-0.032 (0.048)				
CEO resistance	-0.040 ^a (0.012)	-0.023 ^b (0.010)	-0.039 ^a (0.013)	0.014 (0.011)	-0.038 ^a (0.010)	-0.024 ^b (0.008)	-0.036 ^a (0.010)	0.009 (0.010)
Female CEO	-0.002 (0.020)	-0.021 (0.021)	-0.005 (0.022)	-0.052 ^b (0.018)	-0.002 (0.019)	-0.014 (0.017)	-0.004 (0.019)	-0.042 ^b (0.015)
Board reputation	-0.047 ^a (0.011)	-0.016 (0.010)	-0.040 ^a (0.011)	0.025 ^b (0.010)	-0.048 ^a (0.008)	-0.019 ^b (0.007)	-0.040 ^a (0.008)	0.021 ^b (0.008)
Other control variables	yes	yes	yes	yes	yes	yes	yes	yes
Constant	-0.383 ^a (0.035)	-0.280 ^a (0.032)	-0.370 ^a (0.036)	0.061 ^b (0.026)	-0.396 ^a (0.022)	-0.276 ^a (0.021)	-0.384 ^a (0.022)	0.082 ^a (0.017)
Adjusted R^2	0.052	0.062	0.052	0.080	0.051	0.061	0.051	0.080
# observations	30,246	30,246	30,246	30,246	30,246	30,246	30,246	30,246
ρ_0	0.162	-0.068	0.169	-0.313				
ρ_1	-0.288	-0.249	-0.271	-0.071				
χ^2	28.253 ^a	12.978 ^a	26.537 ^a	1.501				

Table 5. Changes in board seats

This table reports estimates from the specification: $\Delta W_i = \alpha_0 + \alpha T_i + X_i\beta + \delta_1 T_i \times \hat{\lambda}_i(Z_i\gamma) + \delta_0(1 - T_i) \times \hat{\lambda}_i(Z_i\gamma) + \eta_i$. The model is the second stage of a two-step procedure as in Vella and Verbeek (1999) that accounts for endogenous treatment effects of targeting. $\hat{\lambda}$ is the inverse Mills ratio (IMR) derived from the first stage of activism targeting reported in Table I.1 in the Internet Appendix. ΔW is the change in board seats and T is the target dummy. Columns 1 and 5 refer to CEO's changes in board seats in the target firm, Columns 2 and 6 to changes in outside board seats. Columns 3 and 7, and 4 and 8 split the changes in outside board seats into seats in public and private firms, respectively. ρ_0 and ρ_1 are the correlation coefficient between error terms in Equations (2) and (4) and Equations (3) and (4), respectively. χ^2 is the Wald Chi-Square value testing the null hypothesis that ρ_0 and ρ_1 are jointly zero. Standard errors are clustered by firm and year, and displayed in parentheses. ^a, ^b, and ^c mean significance at the 1-, 5-, and 10-percent level, respectively. All variables are defined in Appendix B.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Control function				OLS			
	Inside	Outside	Public	Private	Inside	Outside	Public	Private
Target	-0.185 (0.154)	0.045 (0.389)	-0.037 (0.220)	-0.009 (0.247)	-0.184 ^a (0.014)	-0.016 (0.024)	-0.029 ^b (0.013)	0.007 (0.020)
IMR x non-target	0.275 (0.159)	0.218 (0.430)	-0.034 (0.207)	0.355 (0.267)				
IMR x target	-0.040 (0.069)	-0.069 (0.177)	0.010 (0.104)	-0.043 (0.116)				
CEO resistance	-0.028 ^b (0.010)	0.020 (0.026)	0.004 (0.013)	0.006 (0.022)	-0.017 ^c (0.009)	0.029 (0.020)	0.002 (0.012)	0.020 (0.016)
Female CEO	-0.010 (0.022)	0.264 ^a (0.070)	0.176 ^a (0.037)	0.099 ^c (0.048)	-0.027 (0.017)	0.253 ^a (0.057)	0.178 ^a (0.040)	0.077 ^c (0.038)
CEO age	-0.038 ^a (0.004)	-0.058 ^a (0.009)	-0.001 (0.005)	-0.056 ^a (0.006)	-0.039 ^a (0.004)	-0.059 ^a (0.009)	-0.001 (0.005)	-0.058 ^a (0.006)
CEO tenure	0.053 ^a (0.005)	-0.054 ^a (0.010)	-0.050 ^a (0.005)	-0.004 (0.008)	0.053 ^a (0.005)	-0.054 ^a (0.009)	-0.050 ^a (0.005)	-0.003 (0.007)
CEO education	0.002 (0.004)	0.037 ^a (0.009)	0.020 ^a (0.004)	0.014 ^c (0.007)	0.002 (0.004)	0.037 ^a (0.008)	0.020 ^a (0.004)	0.014 ^c (0.007)
CEO board experience	0.002 (0.004)	-0.097 ^a (0.013)	-0.028 ^a (0.007)	-0.046 ^a (0.011)	0.001 (0.005)	-0.098 ^a (0.013)	-0.028 ^a (0.007)	-0.047 ^a (0.011)
General ability index	-0.014 ^b (0.007)	-0.020 (0.020)	-0.045 ^a (0.013)	0.035 ^a (0.008)	-0.018 ^a (0.005)	-0.024 (0.017)	-0.045 ^a (0.012)	0.030 ^a (0.008)
Firm size	0.074 ^a (0.008)	0.023 (0.017)	0.040 ^a (0.010)	-0.017 (0.017)	0.074 ^a (0.008)	0.024 (0.018)	0.040 ^a (0.010)	-0.017 (0.017)
Return on assets	0.015 ^c (0.007)	-0.020 ^b (0.009)	-0.003 (0.006)	-0.017 ^b (0.007)	0.015 ^c (0.007)	-0.020 ^b (0.009)	-0.003 (0.006)	-0.017 ^b (0.007)
Stock return	0.011 ^c (0.006)	0.002 (0.010)	0.004 (0.004)	-0.004 (0.007)	0.015 ^a (0.004)	0.005 (0.006)	0.003 (0.003)	0.002 (0.005)
Analyst coverage	0.002 (0.011)	0.049 (0.028)	0.004 (0.012)	0.049 ^b (0.020)	-0.008 (0.007)	0.042 ^b (0.018)	0.005 (0.009)	0.036 ^b (0.013)
Board size	-0.003 (0.006)	0.005 (0.010)	0.010 ^c (0.006)	-0.005 (0.007)	-0.002 (0.006)	0.006 (0.010)	0.010 ^c (0.006)	-0.004 (0.006)
Independent directors	-0.009 ^c (0.005)	0.024 ^b (0.009)	0.018 ^a (0.005)	0.006 (0.007)	-0.011 ^b (0.004)	0.022 ^b (0.009)	0.018 ^a (0.005)	0.003 (0.007)
Board reputation	-0.043 ^a (0.010)	0.075 ^a (0.024)	0.047 ^a (0.012)	0.026 (0.016)	-0.036 ^a (0.007)	0.081 ^a (0.024)	0.046 ^a (0.013)	0.036 ^b (0.015)
CEO-chair duality	0.027 ^b (0.012)	0.003 (0.028)	-0.013 (0.017)	0.017 (0.018)	0.017 (0.010)	-0.005 (0.021)	-0.012 (0.013)	0.003 (0.015)
Institutional ownership	-0.013 ^b (0.006)	0.025 ^c (0.014)	0.009 (0.008)	0.017 ^c (0.009)	-0.014 ^b (0.006)	0.024 (0.014)	0.009 (0.008)	0.016 (0.009)
Pro-dissident MF ownership	0.000 (0.004)	0.024 ^a (0.007)	0.012 ^b (0.004)	0.011 ^c (0.006)	-0.000 (0.004)	0.023 ^a (0.007)	0.012 ^b (0.004)	0.011 ^c (0.006)

continued on next page

continued from previous page

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Control function				OLS			
	Inside	Outside	Public	Private	Inside	Outside	Public	Private
Pro-management MF ownership	0.006 (0.007)	0.004 (0.016)	0.009 (0.009)	-0.009 (0.013)	0.009 (0.007)	0.007 (0.017)	0.009 (0.007)	-0.004 (0.013)
Constant	-0.276 ^a (0.034)	0.236 ^a (0.078)	0.085 ^b (0.038)	0.188 ^a (0.050)	-0.321 ^a (0.020)	0.200 ^a (0.035)	0.091 ^a (0.022)	0.130 ^a (0.025)
Adjusted R^2	0.055	0.057	0.051	0.035	0.054	0.057	0.051	0.035
# observations	30,246	30,246	30,246	30,246	30,246	30,246	30,246	30,246
ρ_0	0.586	0.220	-0.063	0.470				
ρ_1	-0.080	-0.062	0.017	-0.052				
χ^2	16.829 ^a	3.753	0.289	10.335 ^a				

Table 6. Changes in compensation

This table reports in Columns 1–3 estimates from regression $\Delta W_i = \alpha_0 + \alpha T_i + X_i \beta + \delta_1 T_i \times \hat{\lambda}_i(Z_i \gamma) + \delta_0(1 - T_i) \times \hat{\lambda}_i(Z_i \gamma) + \eta_i$, which is the second stage of a two-step procedure accounting for endogenous treatment effects of targeting. ΔW is -1 for pay decreases, 0 for no change, and $+1$ for pay increases between t_{-1} and t_{+3} . $\hat{\lambda}$ is the inverse Mills ratio (IMR) derived from the first stage of activism targeting reported in Table I.1 in the Internet Appendix. T is the targeting dummy. Columns 4 to 6 report OLS regression results. *Inside* (*Outside*) stands for pay in the target (outside) companies and accounts for board and/or executive compensation. *Total* combines Inside and Outside pay. Compensation data are available for larger firms. ρ_0 and ρ_1 are the correlation coefficient between error terms in Equations (2) and (4) and Equations (3) and (4), respectively. χ^2 is the Wald Chi-Square value testing the null hypothesis that ρ_0 and ρ_1 are jointly zero. Standard errors are clustered by firm and year, and displayed in parentheses. ^a, ^b, and ^c mean significance at the 1-, 5-, and 10-percent level, respectively. All variables are defined in Appendix B.

	(1)	(2)	(3)	(4)	(5)	(6)
	Control function			OLS		
	Total	Inside	Outside	Total	Inside	Outside
Target	-0.787 (0.898)	-0.677 (0.806)	-0.008 (0.496)	-0.118 ^c (0.055)	-0.103 ^c (0.056)	-0.038 (0.041)
IMR x non-target	0.801 (0.837)	0.816 (0.819)	-0.221 (0.489)			
IMR x target	0.275 (0.448)	0.208 (0.393)	0.031 (0.234)			
CEO resistance	-0.152 ^b (0.068)	-0.147 ^c (0.071)	-0.079 ^c (0.041)	-0.108 ^c (0.057)	-0.103 (0.066)	-0.090 ^b (0.034)
Female CEO	-0.004 (0.119)	0.045 (0.135)	0.161 ^c (0.084)	-0.076 (0.096)	-0.021 (0.131)	0.172 ^b (0.063)
CEO age	-0.060 ^c (0.028)	-0.045 (0.028)	-0.031 (0.018)	-0.064 ^b (0.027)	-0.048 (0.028)	-0.030 (0.018)
CEO tenure	-0.057 (0.035)	-0.065 (0.038)	0.001 (0.019)	-0.054 (0.032)	-0.062 (0.035)	0.001 (0.019)
CEO education	-0.018 (0.016)	-0.014 (0.020)	0.018 (0.018)	-0.020 (0.016)	-0.016 (0.019)	0.018 (0.017)
CEO board experience	-0.015 (0.022)	-0.011 (0.023)	-0.025 (0.019)	-0.019 (0.022)	-0.014 (0.023)	-0.025 (0.019)
General ability index	-0.030 (0.029)	-0.017 (0.029)	0.016 (0.025)	-0.046 ^b (0.018)	-0.032 (0.021)	0.020 (0.021)
Firm size	-0.039 (0.045)	-0.082 ^c (0.046)	0.020 (0.030)	-0.047 (0.048)	-0.088 ^c (0.048)	0.020 (0.030)
Return on assets	-0.028 (0.037)	-0.016 (0.038)	0.027 (0.018)	-0.026 (0.037)	-0.015 (0.038)	0.028 (0.018)
Stock return	-0.112 ^a (0.032)	-0.128 ^a (0.031)	-0.000 (0.015)	-0.094 ^a (0.022)	-0.111 ^a (0.023)	-0.004 (0.012)
Analyst coverage	0.014 (0.057)	0.022 (0.057)	-0.011 (0.027)	-0.025 (0.025)	-0.016 (0.029)	-0.003 (0.015)
Board size	0.003 (0.025)	0.025 (0.024)	0.057 ^a (0.018)	0.005 (0.025)	0.027 (0.024)	0.057 ^a (0.018)
Independent directors	0.056 ^c (0.029)	0.074 ^b (0.032)	0.027 (0.016)	0.046 (0.027)	0.064 ^c (0.030)	0.029 ^c (0.015)
Board reputation	-0.077 (0.073)	-0.100 (0.074)	0.066 ^c (0.035)	-0.042 (0.055)	-0.067 (0.061)	0.061 ^c (0.033)
CEO-chair duality	-0.081 (0.060)	-0.078 (0.061)	0.060 (0.044)	-0.125 ^a (0.035)	-0.121 ^b (0.042)	0.071 ^c (0.036)
Institutional ownership	-0.041 (0.027)	-0.040 (0.028)	-0.009 (0.021)	-0.044 (0.026)	-0.043 (0.028)	-0.008 (0.021)
Pro-dissident MF ownership	-0.001	-0.006	-0.010	-0.002	-0.007	-0.010

continued on next page

continued from previous page

	(1)	(2)	(3)	(4)	(5)	(6)
	Control function			OLS		
	Total	Inside	Outside	Total	Inside	Outside
Pro-management MF ownership	(0.017)	(0.016)	(0.011)	(0.017)	(0.016)	(0.011)
	-0.027	-0.017	0.023	-0.010	-0.000	0.019
	(0.028)	(0.032)	(0.021)	(0.019)	(0.022)	(0.018)
Constant	0.471 ^a	0.589 ^a	-0.033	0.351 ^a	0.466 ^a	0.003
	(0.151)	(0.156)	(0.090)	(0.108)	(0.123)	(0.063)
Adjusted R^2	0.058	0.057	0.043	0.058	0.057	0.043
# observations	4,756	4,479	4,756	4,756	4,479	4,756
ρ_0	0.644	0.550	-0.443			
ρ_1	0.264	0.171	-0.005			
χ^2	4.808 ^c	3.883	6.919 ^b			

Table 7. Changes in CEO career prospects: hostility

This table reports estimates from the specification: $\Delta W_i = \alpha_0 + \alpha_1 NH_i + \alpha_2 H_i + \zeta_1 NH_i \times Resist_i + \zeta_2 H_i \times Resist_i + X_i \beta + \delta_1 NH_i \times \hat{\lambda}_i(Z_i \gamma) + \delta_2 H_i \times \hat{\lambda}_i(Z_i \gamma) + \delta_0 NT_i \times \hat{\lambda}_i(Z_i \gamma) + \eta_i$. The model is the second stage of a two-step procedure that accounts for endogenous treatment effects of targeting at different hostility levels. We estimate the targeting regression as an ordered probit model accounting for CEOs who experience no campaign, non-hostile campaign, and hostile campaign and report it Table I.1 in the Internet Appendix. Hostile campaigns involve threats or launches of proxy contests, takeovers, lawsuits, or activists advocating for replacement of management/directors. $\hat{\lambda}$ is the inverse Mills ratio (IMR) computed from the ordered probit model. ΔW is the change in CEO positions (Panel A), executive positions (Panel B), board seats (Panel C), and compensation (Panel D). NH and H represent the non-hostile and hostile activism dummy, respectively. $Resist$ is the CEO resistance dummy. NT is the non-target dummy. F -stat for non-hostile measures non-hostile campaign effect for resistant CEOs ($\alpha_1 + \zeta_1$). F -stat for hostile measures hostile campaign effect for resistant CEOs ($\alpha_2 + \zeta_2$). All specifications include control variables as in Table 4. All variables are defined in Appendix B. Standard errors are clustered by firm and year, and displayed in parentheses. ^a, ^b, and ^c mean significance at the 1-, 5-, and 10-percent level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Control function				OLS			
	Current	Any	Public	Private	Current	Any	Public	Private
Panel A: CEO positions								
Non-hostile	0.128 (0.137)	0.168 (0.106)	0.136 (0.125)	0.108 (0.073)	-0.104 ^a (0.019)	-0.057 ^a (0.017)	-0.091 ^a (0.018)	0.037 ^a (0.011)
Hostile	-0.219 (0.282)	-0.161 (0.227)	-0.267 (0.265)	0.070 (0.129)	-0.252 ^a (0.035)	-0.163 ^a (0.036)	-0.224 ^a (0.029)	0.021 (0.040)
CEO resistance	-0.040 ^a (0.013)	-0.029 ^b (0.013)	-0.043 ^a (0.013)	0.009 (0.013)	-0.039 ^a (0.010)	-0.031 ^a (0.010)	-0.042 ^a (0.010)	0.004 (0.011)
CEO resistance x non-hostile	0.021 (0.025)	0.009 (0.024)	0.015 (0.022)	-0.014 (0.020)	0.004 (0.024)	-0.004 (0.023)	-0.002 (0.022)	-0.013 (0.020)
CEO resistance x hostile	-0.004 (0.035)	-0.008 (0.046)	-0.018 (0.044)	0.004 (0.063)	-0.007 (0.034)	-0.006 (0.046)	-0.018 (0.042)	0.006 (0.062)
IMR x non-target	0.016 (0.184)	-0.065 (0.152)	0.016 (0.174)	-0.112 (0.108)				
IMR x non-hostile	0.176 ^b (0.063)	0.155 ^a (0.049)	0.172 ^b (0.059)	0.031 (0.034)				
IMR x hostile	-0.017 (0.111)	0.006 (0.091)	0.018 (0.108)	-0.010 (0.057)				
Female CEO	-0.003 (0.022)	-0.014 (0.025)	-0.007 (0.023)	-0.043 ^c (0.020)	0.002 (0.018)	-0.004 (0.020)	-0.003 (0.018)	-0.034 ^c (0.016)
Board reputation	-0.047 ^a (0.011)	-0.023 ^b (0.010)	-0.046 ^a (0.010)	0.017 (0.011)	-0.050 ^a (0.008)	-0.027 ^a (0.008)	-0.048 ^a (0.008)	0.013 (0.009)
Other control variables	yes	yes	yes	yes	yes	yes	yes	yes
Constant	-0.368 ^a (0.038)	-0.301 ^a (0.034)	-0.360 ^a (0.039)	0.046 ^c (0.025)	-0.372 ^a (0.022)	-0.290 ^a (0.021)	-0.363 ^a (0.022)	0.065 ^a (0.016)
Adjusted R ²	0.055	0.052	0.054	0.075	0.054	0.052	0.053	0.075
# observations	30,246	30,246	30,246	30,246	30,246	30,246	30,246	30,246
F-stat for non-hostile	1.38	2.96	1.59	1.54	48.76 ^a	10.73 ^a	48.08 ^a	2.09
F-stat for hostile	0.61	0.51	1.02	0.23	65.53 ^a	31.84 ^a	41.03 ^a	0.48

continued on next page

continued from previous page

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Control function				OLS			
	Current	Any	Public	Private	Current	Any	Public	Private
Panel B: Executive positions								
Non-hostile	0.078 (0.137)	0.164 (0.096)	0.094 (0.130)	0.144 (0.087)	-0.120 ^a (0.017)	-0.035 ^b (0.016)	-0.101 ^a (0.017)	0.049 ^a (0.013)
Hostile	-0.287 (0.264)	-0.193 (0.193)	-0.343 (0.254)	0.137 (0.167)	-0.260 ^a (0.032)	-0.127 ^a (0.030)	-0.229 ^a (0.027)	0.040 (0.039)
CEO resistance	-0.043 ^a (0.013)	-0.023 ^c (0.011)	-0.041 ^a (0.013)	0.018 (0.011)	-0.040 ^a (0.010)	-0.025 ^a (0.008)	-0.038 ^a (0.010)	0.010 (0.010)
CEO resistance x non-hostile	0.041 ^c (0.023)	0.020 (0.022)	0.041 ^c (0.022)	-0.021 (0.018)	0.025 (0.022)	0.009 (0.020)	0.025 (0.020)	-0.020 (0.017)
CEO resistance x hostile	-0.006 (0.033)	-0.024 (0.031)	-0.021 (0.043)	0.001 (0.054)	-0.007 (0.030)	-0.020 (0.031)	-0.019 (0.041)	0.003 (0.053)
IMR x non-target	0.049 (0.175)	-0.059 (0.162)	0.052 (0.173)	-0.172 (0.119)				
IMR x non-hostile	0.156 ^b (0.066)	0.137 ^a (0.042)	0.155 ^b (0.065)	0.037 (0.043)				
IMR x hostile	0.007 (0.107)	0.037 (0.073)	0.047 (0.105)	-0.026 (0.069)				
Female CEO	-0.001 (0.021)	-0.021 (0.022)	-0.003 (0.023)	-0.056 ^b (0.019)	0.000 (0.019)	-0.013 (0.017)	-0.003 (0.019)	-0.042 ^b (0.014)
Board reputation	-0.046 ^a (0.011)	-0.015 (0.010)	-0.039 ^a (0.011)	0.026 ^b (0.010)	-0.047 ^a (0.008)	-0.018 ^b (0.007)	-0.039 ^a (0.008)	0.021 ^b (0.008)
Other control variables	yes	yes	yes	yes	yes	yes	yes	yes
Constant	-0.385 ^a (0.037)	-0.285 ^a (0.033)	-0.372 ^a (0.038)	0.052 ^c (0.027)	-0.394 ^a (0.021)	-0.275 ^a (0.020)	-0.381 ^a (0.022)	0.081 ^a (0.017)
Adjusted R ²	0.054	0.063	0.054	0.080	0.053	0.062	0.054	0.080
# observations	30,246	30,246	30,246	30,246	30,246	30,246	30,246	30,246
F-stat for non-hostile	0.84	4.07 ^c	1.11	1.81	43.43 ^a	2.31	28.09 ^a	2.83
F-stat for hostile	1.15	1.27	1.76	0.66	81.03 ^a	32.92 ^a	47.81 ^a	1.61
	Control function				OLS			
	Inside	Outside	Public	Private	Inside	Outside	Public	Private
Panel C: Board seats								
Non-hostile	-0.145 (0.135)	-0.076 (0.360)	-0.046 (0.183)	-0.088 (0.235)	-0.134 ^a (0.020)	-0.055 (0.044)	-0.041 ^c (0.022)	-0.011 (0.033)
Hostile	-0.607 ^b (0.252)	0.777 (0.594)	0.257 (0.358)	0.394 (0.392)	-0.275 ^a (0.036)	-0.050 (0.084)	-0.015 (0.035)	-0.054 (0.077)
CEO resistance	-0.029 ^b (0.012)	0.013 (0.028)	0.005 (0.013)	-0.003 (0.023)	-0.017 ^c (0.009)	0.022 (0.021)	0.002 (0.013)	0.014 (0.017)
CEO resistance x non-hostile	0.010 (0.027)	0.071 (0.065)	-0.006 (0.033)	0.064 (0.046)	-0.001 (0.026)	0.064 (0.064)	-0.003 (0.032)	0.053 (0.045)
CEO resistance x hostile	-0.028 (0.039)	0.123 (0.115)	0.032 (0.043)	0.104 (0.101)	-0.026 (0.038)	0.089 (0.113)	0.025 (0.042)	0.077 (0.097)
IMR x non-target	0.271 (0.181)	0.183 (0.474)	-0.073 (0.226)	0.357 (0.299)				
IMR x non-hostile	0.044 (0.059)	0.018 (0.179)	-0.019 (0.096)	0.011 (0.120)				
IMR x hostile	0.123 (0.098)	-0.400 (0.258)	-0.117 (0.147)	-0.244 (0.185)				
Female CEO	-0.007 (0.024)	0.259 ^a (0.072)	0.172 ^a (0.037)	0.098 ^c (0.048)	-0.025 (0.017)	0.253 ^a (0.057)	0.178 ^a (0.040)	0.078 ^c (0.038)
Board reputation	-0.042 ^a (0.010)	0.077 ^a (0.024)	0.047 ^a (0.012)	0.027 (0.016)	-0.035 ^a (0.007)	0.080 ^a (0.024)	0.045 ^a (0.013)	0.035 ^b (0.015)
Other control variables	yes	yes	yes	yes	yes	yes	yes	yes
Constant	-0.275 ^a (0.037)	0.239 ^b (0.088)	0.079 ^c (0.040)	0.197 ^a (0.057)	-0.321 ^a (0.019)	0.205 ^a (0.035)	0.091 ^a (0.022)	0.135 ^a (0.025)
Adjusted R ²	0.057	0.057	0.051	0.036	0.056	0.057	0.051	0.035

continued on next page

continued from previous page

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
# observations	30,246	30,246	30,246	30,246	30,246	30,246	30,246	30,246
F-stat for non-hostile	1.18	0.00	0.07	0.01	93.59 ^a	0.05	4.03 ^c	2.01
F-stat for hostile	5.96 ^b	2.07	0.60	1.34	99.59 ^a	0.41	0.13	0.23
	Control function			OLS				
	Total	Inside	Outside	Total	Inside	Outside		
Panel D: Compensation								
Non-hostile	-0.631 (0.808)	-0.715 (0.750)	0.051 (0.424)	-0.017 (0.070)	-0.025 (0.081)	-0.027 (0.049)		
Hostile	-1.501 (1.136)	-0.604 (1.075)	0.243 (0.852)	-0.313 ^b (0.142)	-0.413 ^a (0.134)	-0.066 (0.139)		
CEO resistance	-0.143 ^c (0.078)	-0.153 ^c (0.078)	-0.068 (0.044)	-0.092 (0.056)	-0.096 (0.063)	-0.085 ^b (0.033)		
CEO resistance x non-hostile	-0.125 (0.133)	-0.076 (0.129)	-0.055 (0.073)	-0.127 (0.134)	-0.077 (0.129)	-0.043 (0.075)		
CEO resistance x hostile	-0.002 (0.194)	0.227 (0.205)	0.127 (0.185)	0.004 (0.194)	0.172 (0.204)	0.128 (0.187)		
IMR x non-target	0.881 (1.023)	0.965 (1.019)	-0.316 (0.574)					
IMR x non-hostile	-0.276 (0.408)	-0.322 (0.373)	-0.022 (0.211)					
IMR x hostile	0.456 (0.419)	-0.047 (0.413)	-0.107 (0.350)					
Female CEO	0.012 (0.121)	0.067 (0.135)	0.155 ^c (0.087)	-0.071 (0.095)	-0.019 (0.130)	0.174 ^b (0.062)		
Board reputation	-0.071 (0.075)	-0.097 (0.077)	0.069 ^c (0.037)	-0.036 (0.055)	-0.062 (0.061)	0.060 ^c (0.033)		
Other control variables	yes	yes	yes	yes	yes	yes		
Constant	0.480 ^b (0.190)	0.618 ^a (0.193)	-0.053 (0.103)	0.343 ^a (0.108)	0.464 ^a (0.124)	-0.000 (0.064)		
Adjusted R ²	0.059	0.058	0.042	0.059	0.058	0.043		
# observations	4,756	4,479	4,756	4,756	4,479	4,756		
F-stat for non-hostile	1.00	1.20	0.00	2.06	1.24	1.22		
F-stat for hostile	1.70	0.11	0.19	5.74 ^b	2.38	0.34		

Table 8. Hedge funds

This table reports estimates from the specification: $\Delta W_i = \alpha_0 + \alpha HF_i + X_i\beta + \delta \times \hat{\lambda}_i(Z_i\gamma) + \eta_i$. Estimations are conducted separately for non-hostile (Columns 1 to 4) and hostile (Columns 5 to 8) activism samples. For each outcome variable, we include a specification with CEO resistance on its own and a specification with interaction terms between CEO resistance and hedge fund dummy. ΔW is the change in CEO positions (Panels A and B), executive positions (Panels C and D), board seats (Panels E and F), and compensation (Panels G and H). HF is the hedge fund dummy. $\hat{\lambda}$ is the inverse Mills ratio (IMR) constructed from the first-stage order probit regression reported in Column 3 of Table I.1 in the Internet Appendix. F -stat for hedge fund measures hedge fund campaign effect for resistant CEOs (hedge fund + CEO resistance \times hedge fund). Standard errors are clustered by firm and year, and displayed in parentheses. ^a, ^b, and ^c mean significance at the 1-, 5-, and 10-percent level, respectively. All variables are defined in Appendix B.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Non-hostile				Hostile			
	Current	Any	Public	Private	Current	Any	Public	Private
<i>Panel A: CEO positions</i>								
Hedge fund	-0.081 ^a (0.021)	-0.049 ^c (0.025)	-0.066 ^b (0.022)	0.008 (0.023)	-0.082 ^c (0.038)	-0.061 ^c (0.031)	-0.094 ^b (0.039)	-0.002 (0.032)
IMR	0.066 (0.192)	-0.048 (0.198)	0.057 (0.202)	0.037 (0.188)	-0.757 (0.433)	-0.305 (0.393)	-0.706 (0.422)	0.356 (0.461)
CEO resistance	-0.056 (0.045)	-0.070 (0.046)	-0.073 (0.049)	0.030 (0.043)	0.106 (0.100)	0.095 (0.101)	0.076 (0.107)	0.052 (0.076)
Female CEO	0.092 (0.067)	0.019 (0.084)	0.084 (0.075)	-0.131 ^c (0.064)	-0.141 (0.113)	-0.082 (0.118)	-0.152 (0.111)	0.047 (0.144)
Board reputation	-0.051 (0.041)	-0.055 (0.036)	-0.061 (0.038)	-0.019 (0.040)	0.036 (0.054)	0.023 (0.059)	0.037 (0.062)	-0.077 (0.063)
Other control variables	yes	yes	yes	yes	yes	yes	yes	yes
Constant	-0.358 (0.332)	-0.458 (0.343)	-0.393 (0.344)	0.267 (0.311)	1.187 (1.041)	0.264 (0.907)	1.174 (0.981)	-0.685 (1.088)
Adjusted R ²	0.077	0.051	0.076	0.087	0.106	0.076	0.087	0.127
# observations	2,231	2,231	2,231	2,231	1,013	1,013	1,013	1,013
<i>Panel B: CEO positions with interaction terms</i>								
Hedge fund	-0.144 ^a (0.033)	-0.110 ^a (0.029)	-0.126 ^a (0.032)	0.001 (0.021)	-0.116 ^b (0.052)	-0.074 ^c (0.037)	-0.093 ^c (0.050)	0.001 (0.033)
IMR	0.087 (0.185)	-0.028 (0.192)	0.076 (0.197)	0.039 (0.186)	-0.764 (0.441)	-0.308 (0.398)	-0.706 (0.424)	0.357 (0.461)
CEO resistance	-0.110 ^b (0.048)	-0.122 ^b (0.049)	-0.124 ^b (0.049)	0.024 (0.048)	0.067 (0.106)	0.079 (0.100)	0.077 (0.118)	0.055 (0.069)
CEO resis. x hedge fund	0.126 ^b (0.045)	0.123 ^a (0.040)	0.120 ^a (0.039)	0.014 (0.042)	0.065 (0.069)	0.027 (0.060)	-0.002 (0.072)	-0.005 (0.071)
Female CEO	0.092 (0.068)	0.019 (0.085)	0.084 (0.076)	-0.131 ^c (0.064)	-0.143 (0.114)	-0.082 (0.119)	-0.152 (0.111)	0.047 (0.144)
Board reputation	-0.049 (0.041)	-0.053 (0.036)	-0.060 (0.038)	-0.019 (0.040)	0.037 (0.055)	0.023 (0.059)	0.037 (0.062)	-0.077 (0.064)
Other control variables	yes	yes	yes	yes	yes	yes	yes	yes
Constant	-0.287 (0.322)	-0.389 (0.333)	-0.326 (0.340)	0.275 (0.302)	1.224 (1.066)	0.280 (0.924)	1.173 (0.989)	-0.688 (1.089)
Adjusted R ²	0.080	0.055	0.079	0.087	0.106	0.076	0.086	0.126
# observations	2,231	2,231	2,231	2,231	1,013	1,013	1,013	1,013
F-stat for hedge fund	0.38	0.14	0.05	0.14	0.96	0.96	2.84	0.01

continued on next page

continued from previous page

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Non-hostile				Hostile			
	Current	Any	Public	Private	Current	Any	Public	Private
Panel C: Executive positions								
Hedge fund	-0.079 ^a (0.021)	-0.063 ^b (0.023)	-0.067 ^b (0.023)	0.005 (0.031)	-0.082 ^c (0.042)	-0.070 ^c (0.036)	-0.098 ^b (0.042)	0.001 (0.037)
IMR	0.027 (0.197)	-0.047 (0.186)	0.017 (0.202)	-0.103 (0.343)	-0.702 (0.446)	0.030 (0.440)	-0.611 (0.425)	0.462 (0.406)
CEO resistance	-0.062 (0.046)	-0.059 (0.045)	-0.060 (0.053)	-0.008 (0.073)	0.093 (0.096)	0.047 (0.100)	0.070 (0.097)	0.075 (0.070)
Female CEO	0.106 (0.065)	0.002 (0.065)	0.092 (0.064)	-0.098 (0.084)	-0.107 (0.116)	-0.018 (0.118)	-0.134 (0.121)	0.125 (0.117)
Board reputation	-0.049 (0.041)	-0.023 (0.032)	-0.062 (0.039)	-0.010 (0.049)	0.046 (0.055)	0.017 (0.057)	0.049 (0.067)	-0.070 (0.058)
Other control variables	yes	yes	yes	yes	yes	yes	yes	yes
Constant	-0.457 (0.343)	-0.432 (0.326)	-0.494 (0.343)	0.029 (0.564)	1.032 (1.062)	-0.520 (1.018)	0.930 (0.977)	-0.941 (0.941)
Adjusted R ²	0.066	0.051	0.059	0.090	0.090	0.091	0.066	0.126
# observations	2,231	2,231	2,231	2,231	1,013	1,013	1,013	1,013
Panel D: Executive positions with interaction terms								
Hedge fund	-0.133 ^a (0.035)	-0.112 ^a (0.020)	-0.118 ^a (0.033)	-0.003 (0.025)	-0.126 ^b (0.056)	-0.111 ^b (0.042)	-0.115 ^c (0.053)	-0.017 (0.053)
IMR	0.044 (0.189)	-0.032 (0.186)	0.033 (0.198)	-0.101 (0.344)	-0.711 (0.455)	0.022 (0.448)	-0.615 (0.430)	0.459 (0.410)
CEO resistance	-0.107 ^c (0.051)	-0.100 ^c (0.047)	-0.103 ^c (0.056)	-0.015 (0.072)	0.042 (0.097)	-0.001 (0.099)	0.051 (0.099)	0.055 (0.068)
CEO resis. x hedge fund	0.108 ^b (0.040)	0.097 ^b (0.036)	0.100 ^b (0.036)	0.016 (0.046)	0.086 (0.071)	0.081 (0.056)	0.033 (0.074)	0.034 (0.081)
Female CEO	0.105 (0.066)	0.002 (0.066)	0.092 (0.065)	-0.098 (0.084)	-0.110 (0.117)	-0.020 (0.120)	-0.135 (0.122)	0.124 (0.117)
Board reputation	-0.048 (0.040)	-0.022 (0.031)	-0.061 (0.038)	-0.010 (0.049)	0.047 (0.055)	0.018 (0.057)	0.050 (0.067)	-0.069 (0.058)
Other control variables	yes	yes	yes	yes	yes	yes	yes	yes
Constant	-0.397 (0.333)	-0.378 (0.328)	-0.438 (0.340)	0.038 (0.566)	1.082 (1.090)	-0.474 (1.043)	0.949 (0.998)	-0.921 (0.951)
Adjusted R ²	0.069	0.054	0.061	0.090	0.091	0.092	0.065	0.126
# observations	2,231	2,231	2,231	2,231	1,013	1,013	1,013	1,013
F-stat for hedge fund	1.18	0.15	0.44	0.06	0.52	0.37	1.97	0.09
	Non-hostile				Hostile			
	Inside	Outside	Public	Private	Inside	Outside	Public	Private
Panel E: Board seats								
Hedge fund	-0.057 ^b (0.020)	0.051 (0.057)	0.017 (0.029)	0.040 (0.039)	-0.065 (0.043)	-0.032 (0.074)	-0.011 (0.041)	-0.016 (0.057)
IMR	-0.203 (0.258)	-0.784 (0.535)	-0.320 (0.215)	-0.535 (0.506)	-0.679 (0.411)	0.681 (0.603)	0.300 (0.345)	0.459 (0.446)
CEO resistance	-0.098 (0.056)	0.021 (0.113)	-0.016 (0.056)	0.006 (0.100)	0.090 (0.091)	0.021 (0.181)	-0.025 (0.089)	0.041 (0.127)
Female CEO	0.120 (0.081)	0.347 ^c (0.195)	0.191 ^c (0.090)	0.171 (0.153)	-0.123 (0.106)	0.465 ^c (0.244)	0.177 ^c (0.096)	0.308 (0.176)
Board reputation	-0.041 (0.041)	-0.017 (0.100)	-0.021 (0.053)	-0.012 (0.080)	0.075 (0.061)	-0.015 (0.157)	-0.006 (0.059)	-0.024 (0.126)
Other control variables	yes	yes	yes	yes	yes	yes	yes	yes
Constant	-0.847 ^c (0.453)	-1.233 (0.883)	-0.378 (0.397)	-0.860 (0.823)	1.000 (0.988)	-0.950 (1.546)	-0.581 (0.811)	-0.723 (1.087)
Adjusted R ²	0.085	0.059	0.048	0.048	0.100	0.100	0.055	0.090
# observations	2,231	2,231	2,231	2,231	1,013	1,013	1,013	1,013

continued on next page

continued from previous page

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Panel F: Board seats with interaction terms</i>								
Hedge fund	-0.129 ^a (0.035)	0.048 (0.074)	0.018 (0.041)	0.035 (0.058)	-0.119 ^c (0.058)	-0.007 (0.105)	0.049 (0.044)	-0.050 (0.082)
IMR	-0.180 (0.246)	-0.783 (0.538)	-0.321 (0.215)	-0.533 (0.507)	-0.690 (0.424)	0.686 (0.608)	0.312 (0.351)	0.452 (0.446)
CEO resistance	-0.158 ^b (0.065)	0.018 (0.124)	-0.015 (0.064)	0.002 (0.104)	0.027 (0.096)	0.051 (0.163)	0.044 (0.081)	0.002 (0.122)
CEO resis. x hedge fund	0.142 ^b (0.053)	0.006 (0.091)	-0.003 (0.058)	0.010 (0.074)	0.105 (0.069)	-0.049 (0.155)	-0.115 (0.089)	0.065 (0.108)
Female CEO	0.120 (0.081)	0.347 ^c (0.195)	0.191 ^c (0.091)	0.171 (0.153)	-0.126 (0.108)	0.467 ^c (0.247)	0.181 ^c (0.099)	0.306 (0.176)
Board reputation	-0.039 (0.041)	-0.017 (0.101)	-0.021 (0.053)	-0.011 (0.080)	0.076 (0.062)	-0.015 (0.157)	-0.006 (0.059)	-0.024 (0.125)
Other control variables	yes	yes	yes	yes	yes	yes	yes	yes
Constant	-0.768 ^c (0.432)	-1.230 (0.894)	-0.379 (0.398)	-0.854 (0.828)	1.061 (1.026)	-0.978 (1.569)	-0.648 (0.830)	-0.685 (1.089)
Adjusted R ²	0.089	0.058	0.047	0.047	0.101	0.099	0.057	0.089
# observations	2,231	2,231	2,231	2,231	1,013	1,013	1,013	1,013
F-stat for hedge fund	0.17	0.53	0.15	0.82	0.07	0.27	0.83	0.04
	Non-hostile			Hostile				
	Total	Inside	Outside	Total	Inside	Outside		
<i>Panel G: Compensation</i>								
Hedge fund	-0.055 (0.138)	-0.069 (0.133)	0.100 (0.083)	-0.208 (0.187)	-0.090 (0.200)	-0.007 (0.182)		
IMR	1.771 (2.694)	1.076 (2.723)	-0.971 (1.583)	0.819 (4.871)	-2.502 (6.005)	7.200 ^c (3.799)		
CEO resistance	0.176 (0.347)	0.111 (0.388)	-0.159 (0.292)	0.022 (0.727)	0.704 (0.836)	-0.907 (0.629)		
Female CEO	-0.356 (0.787)	-0.224 (0.812)	0.385 (0.376)	0.296 (1.007)	-0.928 (1.441)	1.447 (0.996)		
Board reputation	0.087 (0.342)	-0.011 (0.319)	0.170 (0.212)	-0.493 (0.617)	-0.631 (0.651)	-0.745 ^c (0.367)		
Other control variables	yes	yes	yes	yes	yes	yes		
Constant	3.192 (4.621)	2.177 (4.638)	-1.616 (2.719)	-2.031 (11.699)	7.031 (14.719)	-17.34 ^c (9.291)		
Adjusted R ²	0.134	0.134	0.059	0.201	0.056	0.115		
# observations	701	650	701	123	103	123		
<i>Panel H: Compensation with interaction terms</i>								
Hedge fund	-0.016 (0.172)	-0.073 (0.172)	0.017 (0.131)	-0.255 (0.365)	-0.233 (0.398)	-0.173 (0.243)		
IMR	1.733 (2.684)	1.079 (2.750)	-0.890 (1.572)	0.945 (4.679)	-2.375 (5.880)	7.641 ^c (3.935)		
CEO resistance	0.180 (0.344)	0.111 (0.388)	-0.168 (0.293)	-0.053 (0.807)	0.522 (0.940)	-1.169 (0.761)		
CEO resis. x hedge fund	-0.079 (0.188)	0.007 (0.245)	0.172 (0.144)	0.067 (0.485)	0.220 (0.557)	0.236 (0.355)		
Female CEO	-0.346 (0.790)	-0.225 (0.820)	0.364 (0.370)	0.334 (0.955)	-0.882 (1.430)	1.579 (1.059)		
Board reputation	0.089 (0.342)	-0.012 (0.318)	0.166 (0.209)	-0.505 (0.619)	-0.658 (0.613)	-0.790 ^c (0.386)		
Other control variables	yes	yes	yes	yes	yes	yes		
Constant	3.120 (4.605)	2.182 (4.683)	-1.459 (2.692)	-2.325 (11.197)	6.770 (14.470)	-18.37 ^c (9.583)		
Adjusted R ²	0.133	0.132	0.060	0.191	0.042	0.111		
# observations	701	650	701	123	103	123		
F-stat for hedge fund	0.34	0.11	5.38 ^b	0.54	0.00	0.07		

Internet Appendix (not for publication) to

“Shareholder activism: Blessing or affliction for incumbent CEOs?”

This appendix presents supplementary results not included in the main text.

Internet Appendix I.A Exclusion restrictions

We need to show that our two exclusion restrictions are strong predictors of activism targeting but at the same time are exogenous for CEO labour outcomes, e.g. they do not affect CEO labour outcomes directly but only through activism campaigns.

Staggered board

US firms have either a unitary or staggered board. In a unitary board structure, all directors stand for election each year, while in a staggered board structure, only a fraction of directors stands for election each year. The staggered board structure makes gaining control over the firm more difficult and deters active monitoring ex ante.¹ Table 3 with summary statistics for the full sample of 30,246 CEO-firm-year observations shows that 51% of firms employ the staggered board provision at t_{-1} . In line with our expectation that the staggered board is a strong exclusion restriction, the fraction of staggered boards is significantly smaller in the target sample than the non-target sample (45% versus 52%). Staggered boards discourage activists to intervene. The first stage probit regression results of (4) in Column 1 of Table I.1 in the Internet Appendix confirm this significant relationship when we control for a full set of covariates. In particular, staggered board reduces the probability of activism targeting by 1.07%. This economic effect is significant given the unconditional probability of being targeted is 10.73%.

It is also important to note that the staggered board structure is just one of many anti-takeover provisions: its impact alone on CEOs’ employment status in the firms is

¹This is because the staggered elections will require the activists to win at least two elections in order to attain a majority of the total board seats at the targeted firms.

not straightforward. According to the shareholder interest hypothesis, staggered boards should be viewed as a part of corporations' response to the threat of takeovers by low value suitors rather than a type of long-term employment contract for management (Grossman and Hart, 1980; Bates et al., 2008). As such, the staggered board structure should only deter opportunistic bids while not relating to CEO employment. Nevertheless, a potential concern with the staggered board is that it mechanically facilitates managerial entrenchment and therefore would be endogenous to CEO labour outcomes. In particular, a CEO is more protected from being fired with a staggered board because only a third of their board is changed every year. However, as even with a staggered board majority of board members can change within two votes, this relationship should not hold for CEO position changes over three years or more. We measure CEO position changes from t_{-1} to t_{+3} . Still, the literature does not support this channel. Ge et al. (2016) show that board declassification does not increase CEO turnover-to-performance sensitivity or CEO pay-for-performance sensitivity. Bates et al. (2008) find that the post-acquisition employment of target CEOs in the acquiring firm is similar across targets with and without staggered boards.

To further support the validity of the staggered board structure as an exclusion restriction, we perform two additional tests. First, we compare CEO tenure and CEO/Chairman duality – attributes correlating with entrenchment (Salancik and Meindl, 1984; Goyal and Park, 2002; Masulis, Wang, and Xie, 2007) – for firms with versus without staggered boards. We find insignificant differences (results are untabulated). Second, we include the staggered board dummy in both the first and second stages and find (results are untabulated) that staggered boards do not affect CEOs' post-activism (placebo activism) employment status in their own firm. Overall, we are confident that board classification is associated with a degree of activism deterrence but lacks a direct connection to CEO career outcomes.

Change in mutual fund ownership conditional on stock illiquidity

The second exclusion restriction is inspired by evidence that activists often rely on mutual funds' support to advance their campaigns (Brav et al., 2008, 2021). An increase in mutual fund holdings in firms with illiquid stock should be beneficial in attracting activists. This is because stock illiquidity increases the cost of divesting ownership stakes over short horizons and so mutual funds that recently purchased illiquid stocks are more likely to support activists in facilitating value-enhancing changes rather than “vote with their feet”.

Moreover, mutual funds may increase holdings in illiquid firms because of index tracking. If these passive investors are unhappy with firm performance or managerial decisions after they increased their stake, they may approach activists and encourage them to take up a campaign. Passive investors may not be willing to apply pressure on the company directly and they cannot vote with their feet, but they may be willing to support an activist in effectuating changes. Statements from the financial press corroborate our conjecture. For example, Bruce Goldfarb, the President and CEO of Okapi Partners LLC, a proxy solicitation firm, suggests that “institutional investors want to share the sick children in their portfolio with someone who can help make them better.” At the same time, William Ackman, the founder of the \$16 billion dollars hedge fund Pershing Square Holdings, Ltd., claims that “periodically, we are approached by large institutions who are disappointed with the performance of companies they are invested in to see if we would be interested in playing an active role in effectuating change.”²

Table 3 in the main text shows that the unconditional mean of interaction term between the change in mutual fund ownership and stock illiquidity (measured based on Amihud, 2002) is not different for targeted versus non-targeted firms. However, the first stage estimates in Column 1 of Table I.1 show that activist targeting loads positively and highly significantly on the variable when controlling for firm size. A one standard deviation increase in the change in MF ownership x illiquidity is associated with a 0.99 percentage point increase in the probability of being targeted, other things equal. In

²The statements can be found [here](#).

addition, passive mutual fund trading is in general uncorrelated with fundamentals and hence meets the exclusion restriction condition for ECO employment outcomes (Gantchev and Jotikasthira, 2018).

Relevance and overidentification tests

We test the strength of the two exclusion restrictions in a linear setting rather than with a probit regression. The F statistic for the joint significance of the two variables is 22, confirming their relevance. Moreover, as we have two exclusion restrictions and only one endogenous variable (activism targeting), we perform Anderson and Rubin (1949) and Basmann (1960) tests of overidentifying restrictions. These are tests of the joint null hypothesis that the excluded instruments are valid instruments (i.e., uncorrelated with the error term and correctly excluded from the estimated equation). A statistically significant test statistic indicates that the instruments may not be valid. The Anderson and Rubin (1949) χ^2 and the Basmann (1960) F statistic are both equal to 0.09 ($p = 0.76$), alleviating concerns about endogeneity of the exclusion restrictions.

Internet Appendix I.B Tables

Table I.1. First stage and selection models

Column 1 shows coefficient estimates of the first stage probit regression for targeting $T_i = I(Z_i\gamma + \varepsilon_{ti} > 0)$ that is used to estimate IMR in Tables 4–6 in the main text. Column 2 shows the corresponding marginal effects. Column 3 shows estimates of the first stage ordered probit regressions with the dependent variable equal to zero, one, or two for CEOs who experience no campaign, non-hostile campaign, and hostile campaign, respectively. Columns 4 and 5 show the corresponding marginal effects. Hostile campaigns involve threats or launches of proxy contests, takeovers, lawsuits, or activists advocating for replacement of management/directors. Variables are defined in Appendix B. Heteroscedasticity robust standard errors are displayed in parentheses. ^a, ^b, and ^c mean significance at the 1-, 5-, and 10-percent level, respectively.

	(1)	(2)	(3)	(4)	(5)
	Probit (0,1)		Ordered probit (0,1,2)		
	Coefficient	Marginal pr(1)	Coefficient	Marginal pr(1)	Marginal pr(2)
Staggered board	-0.061 ^a (0.020)	-1.07%	-0.051 ^a (0.020)	-0.54%	-0.37%
Change in MF own. x illiquidity	0.056 ^a (0.010)	0.99%	0.052 ^a (0.010)	0.54%	0.37%
CEO resistance	-0.164 ^a (0.032)	-2.91%	-0.173 ^a (0.032)	-1.83%	-1.26%
Female CEO	0.249 ^a (0.049)	4.97%	0.252 ^a (0.048)	2.88%	2.20%
CEO age	0.015 (0.012)	0.26%	0.014 (0.012)	0.14%	0.10%
CEO tenure	-0.014 (0.014)	-0.25%	-0.009 (0.014)	-0.10%	-0.07%
CEO education	0.006 (0.010)	0.11%	0.005 (0.010)	0.05%	0.04%
CEO board experience	0.013 (0.012)	0.24%	0.014 (0.012)	0.15%	0.10%
General ability index	0.052 ^a (0.013)	0.91%	0.046 ^a (0.012)	0.48%	0.33%
Firm size	0.037 ^c (0.022)	0.66%	0.009 (0.021)	0.10%	0.06%
Return on assets	-0.007 (0.012)	-0.12%	-0.004 (0.012)	-0.05%	-0.03%
Stock return	-0.074 ^a (0.012)	-1.30%	-0.076 ^a (0.012)	-0.80%	-0.54%
Analyst coverage	0.146 ^a (0.016)	2.56%	0.126 ^a (0.015)	1.32%	0.90%
Board size	-0.008 (0.013)	-0.14%	-0.009 (0.013)	-0.09%	-0.06%
Independent directors	0.045 ^a (0.011)	0.79%	0.048 ^a (0.011)	0.51%	0.35%
Board reputation	-0.126 ^a (0.026)	-2.21%	-0.110 ^a (0.026)	-1.15%	-0.80%
CEO-chair duality	0.162 ^a (0.029)	2.88%	0.161 ^a (0.028)	1.70%	1.18%
Institutional ownership	0.008 (0.014)	0.14%	0.020 (0.013)	0.21%	0.14%
Pro-dissident MF ownership	0.005 (0.011)	0.09%	0.009 (0.011)	0.10%	0.07%
Pro-management MF ownership	-0.057 ^a (0.015)	-1.00%	-0.054 ^a (0.015)	-0.56%	-0.38%
Constant	-1.429 ^a				

continued on next page

continued from previous page

	(1)	(2)	(3)	(4)	(5)
	Probit (0,1)		Ordered probit (0,1,2)		
	Coefficient	Marginal pr(1)	Coefficient	Marginal pr(1)	Marginal pr(2)
Cut 1	(0.065)		1.402 ^a (0.065)		
Cut 2			2.013 ^a (0.066)		
Pseudo R^2	0.053		0.038		
# observations	30,246		30,246		
Percent of outcome		10.73%		7.38%	3.35%

Table I.2. Alternative measures for changes in compensation

Panel A reports estimates from the specification: $\Delta W_i = \alpha_0 + \alpha T_i + X_i\beta + \delta_1 T_i \times \hat{\lambda}_i(Z_i\gamma) + \delta_0(1 - T_i) \times \hat{\lambda}_i(Z_i\gamma) + \eta_i$; Panel B from the specification: $\Delta W_i = \alpha_0 + \alpha_1 NH_i + \alpha_2 H_i + \zeta_1 NH_i \times Resist_i + \zeta_2 H_i \times Resist_i + X_i\beta + \delta_1 NH_i \times \hat{\lambda}_i(Z_i\gamma) + \delta_2 H_i \times \hat{\lambda}_i(Z_i\gamma) + \delta_0 NT_i \times \hat{\lambda}_i(Z_i\gamma) + \eta_i$. The models represent the second stage of a two-step procedure as in Tables 6 and 7, respectively, except that ΔW is the change in CEO pay from 1 year before to 3 years after the campaign in logs and scaled per year. All variables are defined in Appendix B. Standard errors are clustered by firm and year, and displayed in parentheses. ^a, ^b, and ^c mean significance at the 1-, 5-, and 10-percent level, respectively.

	(1)	(2)	(3)	(4)
	Control function		OLS	
	Total	Inside	Total	Inside
<i>Panel A: Whole sample</i>				
Target	-0.128 (0.100)	-0.053 (0.079)	-0.063 ^b (0.021)	-0.027 (0.020)
IMR x non-target	0.091 (0.084)	0.058 (0.072)		
IMR x target	0.021 (0.059)	0.002 (0.039)		
CEO resistance	-0.045 ^b (0.019)	-0.049 ^b (0.018)	-0.047 ^b (0.019)	-0.050 ^b (0.018)
Female CEO	0.015 (0.044)	0.028 (0.044)	0.007 (0.039)	0.023 (0.042)
CEO age	-0.036 ^a (0.012)	-0.026 ^b (0.011)	-0.035 ^b (0.012)	-0.025 ^b (0.011)
CEO tenure	-0.014 (0.009)	-0.019 ^b (0.008)	-0.015 (0.009)	-0.020 ^b (0.008)
CEO education	0.004 (0.007)	0.002 (0.007)	0.004 (0.007)	0.002 (0.007)
CEO board experience	-0.011 (0.009)	-0.009 (0.008)	-0.011 (0.009)	-0.009 (0.008)
General ability index	-0.010 (0.009)	-0.005 (0.007)	-0.012 (0.008)	-0.005 (0.007)
Firm size	0.013 (0.022)	-0.007 (0.019)	-0.002 (0.015)	-0.015 (0.015)
Return on assets	-0.025 (0.016)	-0.019 (0.014)	-0.018 (0.014)	-0.015 (0.014)
Stock return	-0.033 ^a (0.008)	-0.033 ^a (0.009)	-0.031 ^a (0.008)	-0.032 ^a (0.008)
Analyst coverage	-0.011 (0.008)	-0.005 (0.008)	-0.012 (0.008)	-0.005 (0.008)
Board size	-0.020 ^b (0.007)	-0.004 (0.006)	-0.019 ^b (0.007)	-0.003 (0.006)
Independent directors	-0.002 (0.010)	0.011 (0.010)	-0.003 (0.010)	0.010 (0.010)
Board reputation	-0.022 (0.023)	-0.038 (0.025)	-0.015 (0.024)	-0.034 (0.024)
CEO-chair duality	-0.052 ^b (0.018)	-0.030 ^c (0.015)	-0.052 ^b (0.018)	-0.030 ^c (0.015)
Institutional ownership	-0.022 ^b (0.009)	-0.021 ^b (0.009)	-0.022 ^b (0.009)	-0.021 ^b (0.009)
Pro-dissident MF ownership	-0.004 (0.008)	-0.004 (0.006)	-0.001 (0.008)	-0.002 (0.006)
Pro-management MF ownership	-0.011 (0.007)	-0.002 (0.007)	-0.011 (0.006)	-0.002 (0.007)
Constant	0.082 ^b	0.125 ^a	0.076 ^b	0.120 ^a

continued on next page

continued from previous page

	(1)	(2)	(3)	(4)
	Control function		OLS	
	Total	Inside	Total	Inside
χ^2	(0.033)	(0.033)	(0.033)	(0.034)
Adjusted R^2	1.080	1.177		
# observations	0.063	0.058	0.063	0.058
ρ_0	4,625	4,293	4,625	4,293
ρ_1	0.256	0.193		
	0.056	0.007		
Panel B: Hostility				
Non-hostile	0.075	-0.070	-0.043	-0.026
	(0.247)	(0.237)	(0.029)	(0.033)
Hostile	-0.536	0.148	-0.158 ^c	-0.169 ^b
	(0.365)	(0.391)	(0.077)	(0.072)
CEO resistance	-0.034	-0.051 ^c	-0.048 ^b	-0.055 ^b
	(0.030)	(0.028)	(0.019)	(0.019)
CEO resistance x non-hostile	-0.005	0.009	-0.001	0.016
	(0.049)	(0.036)	(0.051)	(0.036)
CEO resistance x hostile	-0.015	0.191 ^b	0.009	0.173 ^c
	(0.121)	(0.086)	(0.127)	(0.082)
IMR x non-target	-0.239	-0.091		
	(0.287)	(0.329)		
IMR x non-hostile	0.037	-0.064		
	(0.147)	(0.129)		
IMR x hostile	0.222	-0.144		
	(0.167)	(0.158)		
Female CEO	-0.006	0.023	0.008	0.025
	(0.045)	(0.043)	(0.039)	(0.042)
Board reputation	-0.008	-0.033	-0.014	-0.035
	(0.027)	(0.028)	(0.024)	(0.024)
Other control variables	yes	yes	yes	yes
Constant	0.038	0.110 ^c	0.079 ^b	0.126 ^a
	(0.052)	(0.058)	(0.033)	(0.034)
Adjusted R^2	0.066	0.061	0.065	0.060
# observations	4,625	4,293	4,625	4,293
F-stat for non-hostile	0.08	0.06		
F-stat for hostile	1.71	0.65		