The Rise of Anti-Activist Poison Pills*

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Abstract

We examine the contractual evolution of poison pill design, focusing on declining ownership triggers, acting-in-concert provisions, and synthetic equity clauses that tailor pills to defend against shareholder activism. Using novel data on hedge fund access to SEC filings as a proxy for intervention threats, we find that firms facing activist pressure are more likely to adopt anti-activist pills. Relative to comparable firms under activist scrutiny, pill adopters experience fewer interventions and are less likely to pursue activist-driven policies, such as reduced investment or increased buybacks. These findings contribute to policy debates on the regulation of defensive measures against activist interventions.

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1 Introduction

Hedge fund activism emerged as a major force for managerial discipline during the 2000s (Brav et al., 2015). Activists typically leverage corporate democracy by acquiring relatively small but meaningful stakes in firms they view as undervalued or inefficiently managed. A large body of research has documented these campaigns and their consequences: hedge funds advocate for governance reforms, capital structure adjustments, and increased payouts (Brav et al., 2008; Boyson et al., 2017; Fos, 2017; Gantchev et al., 2019), often running proxy contests to appoint preferred board members and replace existing management (Brav et al., 2008).

However, the literature provides limited evidence on how corporate boards and managers respond to the threat of hedge fund activism. A key reason is that activist threats are difficult to observe: hedge funds must disclose holdings via Schedule 13D only once they cross the 5% threshold. Yet, the threat of intervention typically begins earlier, through undisclosed accumulations or private communications with management (Gantchev, 2013; Eldar and Wittry, 2021; Kirmse, 2024). As a result, studies focusing on public campaigns may both understate the prevalence of activism threats and provide an incomplete picture of how managers respond to such threats.[1] Moreover, relatively little is known about which defensive tactics, if any, are effective against activists who seek influence rather than control.

We study anti-activist poison pills, which provide direct evidence of how boards respond to perceived hedge fund activism risk. Poison pills are widely regarded as the most powerful anti-takeover defense (Coates, 2000). Although they have become less common overall, pills specifically designed to limit activist accumulation of beneficial ownership stakes have proliferated, featuring three key anti-activist provisions (Kahan and Rock, 2019). First, low ownership thresholds (10% or less) trigger the right of other shareholders to purchase shares at a discount at levels well below the 20% thresholds in traditional pills. Second, acting-in-concert provisions aggregate stakes across investors, effectively lowering ownership thresholds for individual activists (Brav et al., 2022a). Third, synthetic equity provisions

[1] For example, Boyson and Pichler (2019) examine how firms adjust governance structures following public campaigns, but such analyses necessarily condition on the activist's decision to pursue public intervention.

treat derivatives such as swaps as beneficial ownership, constraining hedge funds' ability to build economic exposure without triggering the pill.

Notable examples include Avis, whose 2017 pill combined a 10% trigger with both acting-in-concert and synthetic equity provisions, and J.C. Penney, which adopted a series of progressively restrictive pills culminating in a so-called NOL pill, a tax-motivated structure (as we explain below) with a 5% threshold that is particularly restrictive for activists; both pills were reportedly adopted in response to activist pressure (Benoit, 2017; Lattman, 2013).

Our paper provides the first systematic evidence on the use and effectiveness of poison pills as a defense against hedge fund activism. We assemble a novel hand-coded database of poison pill adoptions during 2003–2017.[2] Unlike prior studies that treat poison pills uniformly, we document the unique design features of each pill using firms' public disclosure documents. A central feature of our analysis is that poison pills are not homogeneous: their contractual provisions differ in ways that are critical for identifying which pills target activists and whether they are effective.

The paper presents three main findings. First, we show that poison pills have evolved from generic takeover defenses into increasingly targeted anti-activist devices. As shown in Figure 1, ownership triggers in the typical plan have decreased dramatically: in the most recent period, the median pill has a 10% trigger threshold, and over 40% of pills are net operating loss ("NOL") pills with trigger thresholds of only 5%. NOL Pills, expressly adopted to protect firms' ability to offset future taxable income with NOLs, can significantly limit activists' shareholdings, even though typical activist stakes are generally too small, on their own, to trigger the ownership changes that would limit the use of NOL carryforwards, consistent with practitioner accounts that such pills are used to curb hedge fund activism (Gottfried and Donahue, 2018).[3]

Moreover, the use of acting-in-concert and synthetic equity provisions has increased by over 200% since the 2003–2007 period, and these provisions have become common even

[2]We focus on 2003-2017 because our measure of hedge fund activism is based on SEC log file data that is available only for this period. Additionally, this period marks the proliferation of hedge fund activism.

[3]Under IRC §382, a firm's ability to use accumulated NOLs may be limited following an ownership change, defined as a cumulative increase of more than 50 percentage points in ownership by 5% shareholders over a three-year period. The three-year rolling measurement window further reduces the likelihood that typical activist holding periods would trigger an ownership change, reinforcing the view that NOL pills serve primarily as an anti-activist device. See further Internet Appendix Section IA.A.1.

in low-trigger pills, further constraining hedge fund interventions. Notably, NOL pills have also increasingly included acting-in-concert or synthetic equity provisions, even though these provisions are not motivated by tax considerations. In our empirical analysis, we classify as anti-activist pills those that either take the form of NOL pills (with a 5% trigger) or combine a 10% trigger with acting-in-concert or synthetic equity provisions (Kahan and Rock, 2019).

Second, we show that firms are significantly more likely to adopt anti-activist poison pills when the activist threat rises. To measure such threats, we develop a proxy that captures both public and private hedge fund engagement. Following Kirmse (2024) and Chen et al. (2020), we exploit SEC EDGAR log file data (Gibbons et al., 2021), which tracks all views of firm public filings between 2003 and 2017. We hand-match partially masked IP addresses to activist hedge funds using name lists from Boyson et al. (2022) and Bebchuk et al. (2015) and IP addresses obtained from the American Registry of Internet Numbers (ARIN) Bulk WhoIs data file. The resulting measure—the number of firm filing views by activist hedge funds, or "clicks," each quarter—captures the idea that hedge funds conduct more research on firms they plan to target. Consistent with this, the number of hedge fund clicks is highly predictive of subsequent activist campaigns, robust to alternative functional forms and weighting schemes, and uncorrelated with measures of routine investor attention.[4]

Although firms cannot observe our click measure directly, they can observe many of the underlying signals of activist interest before a 13D filing. Potential targets can become aware of activist interest through direct private engagement with management (Becht et al., 2009; Gantchev, 2013; Levit, 2019; Kirmse, 2024), regulatory filings under the Hart–Scott–Rodino Act, which are based on dollar thresholds and may apply even when investors do not reach the 5% ownership disclosure threshold (Bishop et al., 2026), and market-based signals including stock surveillance services (Lipton et al., 2021; Society for Corporate Governance, 2020), broker leakages (Barbon et al., 2019), and trading anomalies (Brav et al., 2022b) that may reveal covert stock accumulation in anticipation of intervention (Eldar and Wittry, 2021). Our proxy therefore serves as a summary measure of activist interest that is often transmitted to firms through these channels and can prompt a defensive response.

[4]Kirmse (2024) further shows that hedge fund clicks are associated with subsequent governance changes, such as board and CEO turnover, even in the absence of a public campaign.

Figure 2 shows that the raw number of hedge fund clicks increases substantially in the quarter preceding pill adoption and decreases afterward, returning to mean levels. In our baseline specifications, a one-standard-deviation increase in clicks raises the probability of pill adoption in the following quarter by 15 percent. The results are especially strong when evaluating anti-activist poison pills, where the same increase in clicks is associated with a 62 percent increase in adoption probability, relative to the unconditional sample mean. This pattern is notable in light of the justifications companies provide for adopting pills, which typically emphasize protection against "creeping control" or the preservation of tax assets.

We conduct a series of placebo tests showing that the effect is specific to anti-activist pills rather than other pills, to new adoptions rather than routine renewals, and is not driven by non-activist hedge fund attention, hedge fund interest in close competitors, or contemporaneous takeover threats. To further isolate the activist channel, we exploit time-series variation in the relative salience of activism versus takeover threats, and show that anti-activist pill adoption reflects activism risk rather than acquisition risk.

Third, we provide suggestive evidence that anti-activist poison pills are effective in curbing activists' threats. Relative to firms with similar levels of hedge fund attention, pill adopters are significantly less likely to face a 13D filing or a proxy contest. This pattern is concentrated in anti-activist pills, where adoption is associated with a 54% decrease in the likelihood of a public campaign. By contrast, no such relationship exists for non-activist pills, suggesting that the deterrent pattern is specific to the contractual innovations in pill characteristics. We also find supporting evidence that pill adoption is associated with lower CEO turnover following periods of elevated hedge fund attention, consistent with pills shielding incumbent management from activist pressure (DeAngelo and Rice, 1983).

A natural next step is to ask how firms' policies change when activism is deterred. Because hedge fund campaigns typically push for higher payouts and reduced investment (Fos, 2017; Gantchev et al., 2019), one might expect anti-activist pills to be associated with the opposite pattern. Consistent with this intuition, firms that adopt anti-activist pills exhibit lower payouts, higher investment, and higher return on assets relative to firms that undergo hedge fund interventions without a pill, indicating that these pills are associated with long-term, investment-oriented corporate policies. We further find that anti-activist pill adoptions are

accompanied by modestly positive cumulative abnormal returns, suggesting that investors view them favorably on average, and that the long-run performance of pill adopters improves over time.

Anecdotal evidence points in a similar direction: when Netflix adopted a 10% trigger pill to prevent Carl Icahn from acquiring a larger stake in the company, the firm continued pursuing its capital-intensive growth strategy. In the following years, Netflix's market capitalization increased dramatically and its global subscriber base expanded from roughly 30 million to over 200 million, consistent with the successful execution of its long-term investment policy.

Our paper contributes to three strands of the literature. First, we add to the governance literature on the balance of power between managers and shareholders (Gompers et al., 2003; Bhagat et al., 2008). While this literature has traditionally focused on defensive tactics against hostile takeovers (Karpoff and Wittry, 2024), hedge fund activists have emerged as the primary disciplining mechanism, accumulating minority stakes rather than seeking outright control. Unlike hostile takeovers, where boards have time to adopt a pill, a 13D filing leaves management vulnerable to activist pressure and proxy contests.[5] Our paper is closely related to Boyson and Pichler (2019), who examine how firms respond to public activist campaigns. In contrast, we examine the adoption of poison pills in response to the *threat* of such campaigns. We show that these pills deter activism, providing new evidence on how boards and activists compete for influence in modern corporate governance.

Second, our study is related to a large literature on the impact of activist hedge funds, following the pioneering work by Brav et al. (2008). The vast majority of papers find a robust positive association between public interventions and a variety of firm-level outcomes, including stock returns, operating performance, innovation, investment, payouts, and governance, such as CEO and board turnover (Brav et al., 2008; Bebchuk et al., 2015; Greenwood and Schor, 2009, among others).[6] Our findings suggest that anti-activist pills can preserve

[5]As discussed in Section IA.A.1 of the Internet Appendix, the Williams Act requires bidders to provide boards with at least 20 days to respond to a hostile tender offer, whereas an activist must file a Schedule 13D within 10 days of crossing the 5% ownership threshold.

[6]For a review of the empirical literature, see Denes et al. (2017). We note that Coffee and Palia (2015); Greenwood and Schor (2009); Corum and Levit (2019); Boyson et al. (2017); Cremers et al. (2020); Baker (2021) argue that much of the positive correlation between hedge fund activism and value improvements is driven by selection.

board discretion without sacrificing firm performance.

Finally, our article is related to the literature on the valuation effects of poison pills. On the one hand, many prior studies report negative relationships between pill adoptions and both short-term stock price reactions (Malatesta and Walkling, 1988; Ryngaert, 1988; Comment and Schwert, 1995) and Tobin's q (Gompers et al., 2003; Bebchuk et al., 2009; Cremers et al., 2016). On the other hand, other studies find positive associations between pill adoptions and operating performance (Danielson and Karpoff, 2006), the number of takeover bids (Heron and Lie, 2015), and takeover premiums (Heron and Lie, 2006).[7] This literature has largely focused on pills as an anti-takeover device rather than as an anti-activist measure. More recently, Eldar and Wittry (2021) find that pills adopted to curb stock acquisitions by activists during the 2020 market crash were followed by a positive stock market reaction. We show that this positive association characterizes anti-activist pill adoptions more generally.

Overall, our evidence shows that poison pills have evolved into a targeted device for limiting activist ownership and influence. While hedge fund activism is associated with positive stock price reactions and firm performance, our results suggest that restrictions on activist accumulation can also create value in circumstances where limiting activist influence aligns with longer-term firm objectives. The broader implication is that the optimal allocation of control between activists and boards is context dependent, reflecting firm-specific circumstances rather than a single governance regime. These findings contribute to ongoing debates over the economic consequences of restricting activist accumulation and the extent to which boards should retain discretion to limit activist influence under current governance and legal frameworks (Goshen and Steel, 2022; Gordon, 2022; Aggarwal and Eldar, 2026).

2 The Evolution of Pill Characteristics over Time

We construct our dataset by initially sourcing poison pill adoptions from Thomson Reuters SDC Platinum, then manually reviewing all pill documents on SEC EDGAR. We code whether each pill is a first-time adoption, a modification of existing terms, or a renewal

[7] Evidence on the effect of statutes that protect poison pills from judicial review (Cremers et al., 2024; Karpoff and Malatesta, 1989; Karpoff and Wittry, 2018; Cain et al., 2017; Eldar and Magnolfi, 2020) is mixed.

via restatement or extension.[8] Importantly, we code the design features of poison pills that relate to hedge fund activism.

These data facilitate an exploration of the evolution of poison pill characteristics. We begin with the most important feature: the *trigger threshold*, which is the percentage of ownership that, when crossed by the acquiring person, entitles all other shareholders to buy additional shares of the company at a discount. A high threshold (e.g., 20%) is unlikely to dissuade hedge funds, which typically engage in activism with a much lower ownership percentage (e.g., see Brav et al., 2008). Pills with the lowest trigger thresholds of 5% are virtually always *NOL pills*, designed to protect the firm's net operating loss carryforward.

Figure 1A splits pills into four categories based on the trigger thresholds: (1) pills with a 5% threshold (essentially, NOL pills), (2) a 10% threshold, (3) a 15% threshold, and (4) a 20% threshold or above.[9] Between 2003 and 2007, the vast majority of pills had a trigger of 15 percent or higher. Relative to this early period, the rates of NOL and 10 percent pills increased dramatically in later periods, such that more than 60 percent of pills had a 10 percent trigger or lower. The gradual decrease in trigger thresholds from an average of about 15 percent to 10 percent and the increase in the rate of NOL pills (e.g., see Figure 1B) demonstrate that pills have become more restrictive for hedge funds that may seek to actively influence firm policy with relatively large ownership stakes.

There has also been an increase in the rates of both *acting-in-concert* provisions and *synthetic equity* provisions (see Figure 1B). Acting-in-concert provisions aggregate the ownership stakes of investors who coordinate their purchases (with or without an express agreement), share a common purpose in acquiring stock, or in some plans, even engage in parallel purchases, for purposes of determining whether the trigger threshold has been exceeded. These provisions make it harder for hedge funds to form "wolf packs" with each firm holding a small number of shares (Brav et al., 2022a). Synthetic equity provisions treat derivative positions in the company as if they were equity ownership in the company's stocks. A classic

[8] In many instances, when a poison pill is renewed or modified, the adoption dates are updated to the date of the modification or renewals. When disclosures indicate prior amendments, we code and incorporate these earlier amendments into the dataset. In addition, in many cases (204 instances, or roughly 10%) SDC does not distinguish between pill adoptions and cases in which the board removes an existing poison pill (pill terminations).

[9] The 10% and 15% categories include a few pills with thresholds slightly above 10 and 15 percent but below 15 and 20 percent, respectively.

example is a cash-settled total-return swap that replicates the stock's economics without conferring voting rights, often paired with a small (single-digit) equity stake.[10] Such positions can give hedge funds substantial exposure to a company—for example, Icahn's 24.6% economic exposure to Bausch Health (Satija and Nishant, 2025). Synthetic equity provisions are designed to prevent funds from accumulating significant exposure without owning the underlying shares.

A more granular analysis shows that these increases in acting-in-concert and synthetic equity provisions are present even in pills with lower trigger thresholds (e.g., see Figure 1C and Figure 1D). In particular, the likelihood that pills with a 5 or a 10 percent trigger threshold include an acting-in-concert or synthetic equity provision in later periods more than doubles compared to earlier periods.[11] Strikingly, the rate of synthetic equity provisions in pills with a 10 percent trigger increased to 90 percent in the 2013–2017 period.

It is important to emphasize that this evolution in pill design occurred during a period in which institutional shareholders and proxy advisors such as ISS pressured firms to remove poison pills (Renjie and Xia, 2024). However, as shown in Figure 3, even as the overall number of pills declined, the number of low-trigger pills increased. In the latter part of our sample, the number of such pills approaches the number of hostile activist interventions they are designed to deter.

ISS policies and Delaware courts have effectively enabled this evolution by condoning NOL pills without closely scrutinizing their tax justifications and by permitting 10% pills with short durations. Consistent with this, we observe a decline in pill duration over time, from an average of 6.5 to 2.7 years.[12] Despite shorter durations, anti-activist pills remain effective at deterring activists because campaigns typically unfold quickly.

In summary, these trends provide evidence that poison pills have evolved to incorporate

[10]Derivatives that confer voting rights on the holder already count as beneficial ownership for purposes of Schedule 13D and under the terms of the pill.

[11]The acting-in-concert and synthetic equity provisions capture transactions that do not affect the tax treatment of net operating losses. For an example of a NOL pill that includes such provisions, see www.sec.gov/Archives/edgar/data/0001177845/000118518516004927/0001185185-16-004927-index.htm

[12]Figure IA.1 presents trends in the other pill characteristics: (a) the duration for which the plan remains active, (b) provisions requiring shareholder vote for approving or maintaining a pill, (c) chewable pills that are not triggered by qualified or permitted offers to acquire the company, and (d) provisions that discriminate against activist investors by applying higher trigger thresholds for institutional shareholders, grandfather provisions, and adverse person clauses.

features that constrain hedge fund activism, consistent with boards adapting pill design in response to the growing prominence of activist hedge funds.

3 Main Data and Descriptive Statistics

3.1 Activist Hedge Fund Click Data

Our dataset combines the poison pill data (described in Section 2) with activist hedge fund views of public disclosure documents on the SEC EDGAR website ("hedge fund clicks"), non-activist hedge fund views of public disclosure documents ("non-activist hedge fund clicks") and year-quarter financial and industry data on public corporations. These activist hedge funds consist of all 13D filers from 1994 to 2018 identified as hedge funds.[13] Following Kirmse (2024), we classify non-activist hedge fund clicks by randomly sampling 600 funds labeled as "hedge funds" in Preqin and excluding 13D filers.

We obtain hedge fund click data from the SEC EDGAR log file website, which tracks all views of SEC public filings between 2003 and 2017.[14] The log files provide (partially masked) IP addresses for all website visitors, which we hand-match to activist hedge funds using the name lists from Boyson et al. (2022) and Bebchuk et al. (2015) and hedge fund IP addresses from the American Registry of Internet Numbers (ARIN) Bulk WhoIs data file. Our method for unmasking IP addresses follows Chen et al. (2020).

The combination of these data allows us to calculate the number of SEC filing views by 429 unique activist hedge funds, referred to as hedge fund "clicks," each quarter between 2003 and 2017.[15] A detailed description of the clicks data construction process is available in Kirmse (2024) and in Section IA.B.1 of the Internet Appendix.

We use activist hedge fund clicks as a novel proxy for the threat of an intervention, which is typically unobservable unless a Schedule 13D is subsequently filed. It is important to note

[13]We thank Nicole Boyson for providing the data from her 2017 paper, and Wei Jiang and Alon Brav for providing the data used in their previous activism projects, updated through 2018.

[14]There is a lapse in the EDGAR log file data in late 2005 and early 2006. We drop 2005Q4 and 2006Q1 in our empirical results. For more information on the lapse in EDGAR log file coverage, see Ryans (2017), Bauguess et al. (2018), and Gibbons et al. (2021).

[15]Similarly, our measure for non-activist hedge fund clicks, used for placebo tests, is based on the views of 81 non-activist funds that we match to IP address data from the ARIN Bulk WhoIs file.

that these data were not available to target firms in real time. However, there are several channels through which firms may become aware of hedge fund threats. First, hedge fund threats could involve private communication between hedge funds and firm management (Becht et al., 2009; Gantchev, 2013; Levit, 2019). CFOs report that direct communication with hedge funds is the most common form of engagement their firms encounter (Ruggeri, 2015), and Kirmse (2024) estimates that such interactions account for up to 59% of all activist interventions. Second, threats may also include covert purchases of shares by multiple hedge funds to gain a sizable stake in anticipation of a formal intervention (Eldar and Wittry, 2021). Specialized firms offer stock surveillance and shareholder identification services such as Activist Insight and Innisfree M&A (Lipton et al., 2021; Society for Corporate Governance, 2020), which may provide early alerts about hedge fund stock accumulations. Likewise, anecdotal evidence suggests that connected individuals sometimes tip off the media or even the target itself (Chung, 2014).

More broadly, firms may be aware of general hedge fund interest even without knowledge of a specific threat. Abnormal spikes in trading volume (Brav et al., 2022b) or information leakages from brokers employed by hedge funds (Barbon et al., 2019) may alert management to an impending intervention. Moreover, there is evidence that activism-related content in sell-side analyst reports (Chen and Shohfi, 2022) and decreases in option-implied volatility (Collin-Dufresne et al., 2021) are correlated with subsequent public activism events. Additionally, Chabakauri et al. (2022) find that corporate insiders can detect activism-motivated trades. Finally, institutional shareholders often have similar concerns and goals as activists, and may provide guidance to the firm by expressing their dissatisfaction (e.g., see Kedia et al., 2020). In line with this, Gantchev and Jotikasthira (2018) find that large institutional sales often precede hedge fund activism. Thus, firms are often aware of a general threat of activism, even when there is no direct communication with a specific fund.

We validate the clicks proxy along several dimensions. First, hedge fund clicks are positively correlated with the industry-level activism threat intensity measure constructed by Gantchev et al. (2019), confirming that our firm-specific proxy captures meaningful varia-

tion in the broader threat environment (Figure IA.2).[16] Second, at the fund-firm level, a hedge fund's clicks on a given firm's filings are strongly predictive of that fund subsequently targeting the firm in a public campaign, even after absorbing fund×firm, fund×quarter, and firm×quarter fixed effects (Table IA.1). The estimated coefficient implies that an additional 100 clicks by the focal fund is associated with an approximately 16-fold increase in the probability of that fund targeting the firm, relative to the unconditional base rate of 0.01%. Third, this predictive power is specific to the targeting fund: clicks by non-targeting hedge funds on the focal firm do not predict campaigns (Table IA.2), and a permutation test in which each fund's clicks are replaced by those of a randomly drawn non-focal fund researching the same firm confirms that only the targeting fund's own clicks predict its campaigns (Figure IA.3). Fourth, the relationship between clicks and outcomes is approximately monotonic along the intensive margin: higher click intensity is associated with progressively greater probabilities of becoming a target (Panel A of Figure IA.4). Fifth, we show that clicks do not simply capture routine investor attention, proxied by Bloomberg's HeatDex measure (Ben-Rephael et al., 2017; Iliev et al., 2021), as HeatDex does not predict subsequent activist intervention (Table IA.3). Taken together, these results support the interpretation that clicks capture intervention intent rather than routine research.

In our context, the clicks measure offers an advantage over studies focusing on public events such as 13D filings, letters to the board, and proxy contests, which likely understate the prevalence of poison pills adopted in response to potential or private interventions (e.g., see Boyson and Pichler, 2019). Importantly, using activist hedge fund clicks to proxy for activism threats improves on prior measures based on industry threats. While industry-level metrics (e.g., see Gantchev et al., 2019; Feng et al., 2021) reveal potential spillover effects of hedge fund activism, they leave room for alternative interpretations, such as the adoption of pills driven by industry merger waves (Harford, 2005).[17] Because our proxy varies across firms within an industry, our empirical design effectively rules out such concerns by incorporating industry-by-quarter fixed effects.

[16] Notably, in unreported regressions, the industry-level measure does not predict pill adoption, unlike our firm-level measure of hedge fund interest, underscoring the importance of firm-specific variation for identifying defensive responses.

[17] Gantchev et al. (2019) also introduce within-industry variation by constructing a board-linked network of *threat* perception.

We then merge SEC click data, as well as data on poison pill adoptions, to year-quarter financial data from the CRSP/Compustat Merged database. We exclude firms located or incorporated outside of the U.S., as well as firms in regulated utilities (SICs 4900-4949), closed-end funds (SIC 6726), REITs (SIC 6798), and firms with missing or zero total assets at the quarterly level. We drop firms that have no clicks in the SEC Edgar log files for the entire sample period. Lastly, we use merger and acquisition announcements from Thomson Reuters SDC Platinum, and hand-collected data on news of merger rumors surrounding the adoption of poison pills in our sample. In total, our baseline results include 6,463 unique firms and 175,122 firm-year-quarter observations. Our sample period spans from 2003 through the third quarter of 2017, which corresponds to the full sample of the SEC EDGAR log files. All continuous variables are winsorized at the 1% and 99% levels, and all variables are defined in Table A.1.

3.2 Descriptive Statistics

Table 1 reports summary statistics for a variety of financial and governance variables in our sample. The average number of clicks on firms' SEC filings from any IP address in a given quarter is 1,835, with a median of 924, while the average number of hedge fund clicks is 10 with a median of 2. The total number of poison pills in our sample is 1,011, and nearly 10% of firms adopt a pill during the sample period.

Table 2 examines whether the characteristics and provisions of pill adoptions are unconditionally correlated with hedge fund clicks in our sample. Because the distribution of hedge fund clicks is heavily skewed, we split firms that adopted pills into three groups based on the number of hedge fund clicks in the quarter preceding adoption: (1) firms with no hedge fund clicks, (2) firms that experienced some clicks but below the 99th percentile of hedge fund clicks per quarter, and (3) firms that experienced a large number of clicks, at the 99th or 100th percentile of clicks per firm-quarter.

The poison pills adopted by firms in each group display markedly different characteristics. Pills adopted following a large number of clicks have a much lower trigger threshold on average, about 10 percent, compared to about 14 percent for the other groups. Strikingly, over one-third of the pills associated with a large number of clicks are NOL pills, compared to

about 20 percent and 8 percent in the groups of firms with some clicks and no clicks, respectively. Moreover, the percentage of acting-in-concert provisions is nearly 39 percent, more than three times the percentage in the other two groups, while synthetic equity provisions appear in more than 60 percent of pills in the high-click group. Treating clicks continuously yields a similar pattern: Panels B and C of Figure IA.4 show that higher click intensity is associated with progressively greater probabilities of pill adoption and, in particular, anti-activist pill adoption. Taken together, these patterns indicate a strong positive relation between hedge fund clicks and the adoption of anti-activist pill provisions.

As a final step in understanding the unconditional patterns in the data, Table 3 splits firm-year-quarter observations into two comparisons: (1) quarters in which firms adopt anti-activist pills and those in which they do not (Panel A), and (2) quarters in which firms are targeted by a hedge fund and those in which they are not (Panel B). Consistent with our argument that poison pills serve as a strategic response to activism threats, the differences in the two comparisons are similar. For example, both firms adopting anti-activist poison pills (Panel A) and those targeted by hedge funds (Panel B) tend to have higher leverage, larger net operating losses, lower operating performance and Tobin's q, and smaller dividends than their respective comparison groups. Thus, the similarity between firms adopting anti-activist pills and hedge fund targets suggests that the former share characteristics associated with vulnerability to hedge fund intervention.

4 Main Results

The time trends and summary statistics in previous sections suggest a strong relationship between the adoption of poison pills, especially those with anti-activist provisions, and the threat of a hedge fund intervention. We formally test this relationship below. As a first step, Figure 2 displays an event study of hedge fund clicks surrounding pill adoptions in our sample. In particular, we plot the average number of clicks in 90-day buckets before and after pill adoptions, such that period $t = 0$ represents clicks in the 90-day period following the adoption date. Hedge fund clicks spike in the 90-day period prior to adoption and remain elevated through the period ending 90 days following it. In subsequent periods, the number

of hedge fund clicks gradually reverts to baseline levels. This pattern holds even if a Schedule 13D is not filed (Figure IA.5), and is consistent with the hypothesis that poison pills are used as a strategic response to the mere threat of activism.

We test this hypothesis by employing the following empirical specification:

$$Pill\ Adoption_{i,t} = \beta HF\ Clicks_{i,t-1} + \gamma Total\ Clicks_{i,t-1} + \delta X_{i,t-1} + \eta_i + \mu_{j,t} + \varepsilon_{i,t}, \quad (1)$$

where $Pill\ Adoption_{i,t}$ is an indicator variable that equals one if a firm adopts a pill in year-quarter t, and the variable of interest $HF\ Clicks_{i,t-1}$ is the number of hedge fund clicks (in 100s) on public disclosure documents of firm i in quarter $t-1$. We also control for $Total\ Clicks_{i,t-1}$, which represents the total number of clicks, excluding activist hedge fund clicks, in the previous quarter, to address the concern that hedge fund clicks simply reflect broader investor interest in the company. $X_{i,t-1}$ includes standard financial and governance controls. We cluster standard errors at the firm level.

To further limit the possibility of omitted variables, we also include firm fixed effects (η_i) and industry-by-year-quarter fixed effects ($\mu_{j,t}$). Firm fixed effects are important for ruling out time-invariant firm characteristics that may drive both hedge fund interest and pill adoptions (e.g., firms with high agency costs). Moreover, including industry-by-year-quarter fixed effects strengthens identification against standard endogeneity arguments. For example, these fixed effects mitigate the concern that we are simply documenting industry-wide activism trends (e.g., Gantchev et al., 2019), which may be coincidentally related to industry-level M&A activity driving poison pill adoptions (e.g., Harford, 2005).

The results are reported in Table 4. As shown in Column (1), hedge fund clicks are strongly related to pill adoptions in the subsequent quarter. The coefficient is statistically significant at the 1% level and indicates that an additional 100 hedge fund clicks are associated with a 0.3 percentage point increase in the likelihood that a firm adopts a pill. Given that the unconditional probability of a poison pill adoption is 0.58% in our sample, the results are also economically significant. Put differently, a one-standard-deviation increase in hedge fund clicks (approximately 29 clicks) corresponds to a 15% increase in pill likelihood relative to the sample mean. In contrast to hedge fund clicks, the coefficient on total clicks, which proxies for general interest in the firm and captures firm-specific news, is not statistically

significant.[18]

Column (2) adds a variety of control variables meant to account for remaining time-varying heterogeneity in pill adoptions, such as the natural log of book assets and return on assets. The control variables generally exhibit the expected sign or are statistically insignificant. For example, poorly performing firms are significantly more likely to adopt poison pills in the following quarter. In Column (3), we add additional controls for the firm's governance choices (e.g., board independence and CEO-chair duality). Importantly, the coefficient of interest on hedge fund clicks remains stable and statistically significant at the 1% level in both Columns (2) and (3). Column (4) of Table 4 considers an alternative specification of our independent variable of interest. In particular, we use an indicator variable that equals one when the number of hedge fund clicks exceeds the 99th percentile of the distribution. Consistent with the idea that a very high number of clicks represents more intense research and likely targeting by activists, our results are particularly strong in Column (4). These results are robust to alternative functional forms that address the skewed distribution of clicks, including log and inverse hyperbolic sine transformations (Table IA.4).

Next, we test our conjecture that contractual innovations in poison pills, such as lower triggers, have coincided with the emergence of hedge fund activism as a key disciplining device in the market for corporate control. In Table 5, we focus on pills with provisions that likely intended to target hedge funds: (1) pills with triggers of 10% or lower, (2) NOL pills (trigger of 5%), (3) acting-in-concert provisions, and (4) synthetic equity provisions. Column (5) examines all anti-activist pills, which we define as either (i) NOL pills or (ii) pills with a 10% trigger combined with an acting-in-concert or synthetic equity provision. We use the same set of control variables as in Column (2) of Table 4 in all models.

Each column of Table 5 shows a positive and statistically significant relationship between activist hedge fund clicks and the adoption of poison pills with various anti-activist provisions. Moreover, the economic significance is substantial. For example, the coefficient in Column (5) suggests that a one-standard-deviation increase in hedge fund clicks is associated with a 62% increase in the likelihood of an anti-activist pill. Even NOL pills alone show

[18]Similarly, the Bloomberg HeatDex, which measures routine investor attention on Bloomberg terminals, does not predict pill adoption (Table IA.3).

a 44% increase (Column 3), although the estimate is only statistically significant at the 10% level.

In the Internet Appendix, we further show that these results hold in specifications with fund-firm and fund-quarter fixed effects that absorb persistent differences in EDGAR usage across funds (Table IA.5), and under alternative weighting schemes based on fund size, past campaign success, and aggressiveness (Tables IA.6 and IA.7). These results indicate that the documented effects are not driven by a small number of unusually large or aggressive funds, nor by arbitrary choices in how click intensity is aggregated.

Overall, we show a robust relationship between hedge fund interest and the adoption of poison pills with anti-activist provisions, such as low trigger thresholds, acting-in-concert clauses, and synthetic equity provisions. Moreover, these results remain significant across various model specifications, reinforcing the idea that poison pills are a strategic response to the threat of hedge fund activism. In the next section, we subject these results to a series of placebo and identification tests.

5 Omitted Variables and Selection Bias

A potential concern with our analysis in Section 4 is that the association between pill adoptions and hedge fund clicks is driven by omitted variables and selection. In this section, we conduct several placebo tests to address this concern, and introduce plausibly exogenous variation in the salience of hedge fund threats relative to hostile takeover threats.

Table 6 Panel A presents four distinct placebo tests. First, because underperforming firms are targets for both potential acquirers and activist hedge funds, these same firms may be more likely to adopt poison pills to ward off potential hostile takeover offers, rather than due to potential activist interventions. This confounding factor could imply a similar relationship across pills with and without anti-activist provisions (e.g., low versus high trigger thresholds), as both types make it impossible for a bidder to acquire the company without the board's acquiescence (Coates, 2000). In Column (1), we examine the relationship between hedge fund clicks and the adoption of pills without activist provisions. The coefficient on hedge fund clicks for non-activist pills is small and statistically insignificant, suggesting that

only anti-activist pills are directed at hedge funds.

Second, we exploit the timing of pill expiration dates, which range from one to ten years and are set in advance when the pill is adopted. Pills are often renewed upon expiration. If underperforming firms are more likely to adopt or maintain poison pills, and poor performance also attracts hedge fund interest, we would expect routine renewals at expiration to be correlated with hedge fund clicks, just as in Table 4. Column (2) shows that the coefficient on hedge fund clicks for renewals is close to zero and not statistically significant.[19] Overall, these first two models suggest that pill adoptions are not merely a function of poor performance correlated with hedge fund clicks, but rather arise in direct response to hedge fund interest. They also mitigate concerns about reverse causality, namely, that hedge funds view firm filings because of important corporate events.

Third, hedge funds closely monitor their portfolio holdings and often obtain private information about a firm. Such information may include takeover rumors, dissatisfaction among institutional investors, or other firm-specific developments, which could drive both hedge fund attention and pill adoptions. To test this possibility, Column (3) adds clicks by non-activist hedge funds, which also track firm-specific news closely but do not actively engage with management and therefore do not pose a threat that would necessitate a poison pill to curb their influence. The coefficient on non-activist hedge fund clicks is close to zero and statistically insignificant.

Finally, there is a concern that industry-wide effects drive both pill adoptions and hedge fund interest, creating a spurious correlation between the two. For instance, firms may take preemptive actions when industry peers are targeted by hedge funds (Gantchev et al., 2019). More broadly, industry-wide agglomeration effects (Harford, 2005), particularly among close competitors, could also influence both hedge fund attention and the adoption of poison pills. To address this concern, Columns (4) through (6) incorporate activist hedge fund clicks on a firm's closest one, three, or five TNIC competitors (Hoberg and Phillips, 2016). The coefficients on clicks by activist hedge funds on a firm's competitors are close to zero and statistically insignificant.

[19] We normalize the coefficients in Panel A of Table 6 by dividing each variable by its standard deviation to facilitate comparisons across independent variables.

Across all models, the coefficients on activist hedge fund clicks are stable and statistically significant at the 1% level. While no set of placebo tests can rule out all alternative explanations, Panel A provides reassurance that the most salient selection and omitted variable concerns do not drive our main results.

Next, we introduce plausibly exogenous variation in the salience of hedge funds threats relative to latent takeover threats. Specifically, we exploit the procyclicality of the M&A market (Golbe and White, 1988) driven by capital liquidity (Shleifer and Vishny, 1992; Eisfeldt and Rampini, 2006). Harford (2005) develops a proxy for high capital liquidity, or "ease of financing in the economy," based on the spread between the average interest rate on commercial and industrial (C&I) loans and the Federal Funds rate. A wider C&I spread signals tighter credit conditions (Lown et al., 2000), which reduces M&A activity and makes hostile takeover threats less salient relative to activist threats.

Figure IA.6 plots the annual number of public acquisitions, the C&I rate spread, and NBER recession periods from 1985 through 2020. The correlation between the C&I rate spread and public acquisitions is -67%, consistent with Harford (2005). However, while acquisitions typically decline during recessions and periods of low capital liquidity, there is little evidence that activist hedge funds behave in a similarly procyclical manner. On the contrary, anecdotal evidence suggests that many hedge funds increase activity during market downturns aiming to acquire large stakes at discounted prices (e.g., see Eldar and Wittry, 2021).[20] Thus, it is reasonable to expect that managers react more defensively, for example by adopting anti-activist poison pills, to potential hedge fund interventions during recessions and periods of declining capital liquidity, precisely when takeover threats are less salient.

Panel B of Table 6 presents empirical tests of this conjecture. In particular, Columns (1) through (3) interact activist hedge fund clicks with an indicator that equals 1 during for quarters during the financial crisis, and 0 otherwise, while Columns (4) through (6) interact hedge fund clicks with the C&I rate spread. Additionally, Panel B separates the dependent variable (all pill adoptions) into those containing anti-activist provisions (Columns (2) and (5)) and those without activist provisions (Columns (3) and (6)). We argue that the

[20] Additionally, the correlation between the C&I rate spread and the number of public activism campaigns over the 1985–2020 period is 31%.

interaction terms capture management's strategic response to hedge fund threats when the salience of activism is high relative to the threat of hostile bids.

Consistent with our conjecture, poison pills are more likely to be adopted following elevated hedge fund interest during recessions and when capital liquidity is low (high C&I rate spreads). In line with earlier results, this pattern holds only for poison pills with anti-activist provisions. By contrast, the interaction terms for non-activist pills have the opposite sign, suggesting that these pills target potential acquirers rather than activists. These results are consistent with the prediction that when takeover activity is low, such as during periods of tight credit markets, the estimated relationship between hedge fund attention and the adoption of anti-activist poison pills is stronger. In sum, Table 6 provides evidence that high hedge fund interest is associated with firm adoption of anti-activist poison pills. Together with the validation results in Section 3, these tests strengthen the interpretation that the relationship between hedge fund attention and anti-activist pill adoption reflects a strategic response to activist threats.

6 Anti-Activist Poison Pills and Hedge Fund Interventions

This section examines how poison pill adoptions relate to hedge funds' ability to launch interventions and achieve their stated objectives. Specifically, do anti-activist poison pills effectively deter public campaigns, and do they shift bargaining power in favor of incumbent management when activism nonetheless occurs? Because both pill adoption and activist escalation are strategic choices, our results capture equilibrium outcomes and should be interpreted accordingly.

6.1 Public Activism Campaigns

Though we argue that the contractual terms of poison pills have evolved to target activists specifically, it remains unclear whether pills, on average, impose hurdles significant enough to deter the typical hedge fund. For example, hedge funds may still be able to pressure

managers to accept their positions despite the presence of a pill. In particular, the majority of pills have a trigger of 10 percent or higher, and hedge funds may be able to exert sufficient pressure even with a smaller ownership stake. On the other hand, the high costs of monitoring and contesting corporate boards may deter hedge funds if they cannot purchase a sizable stake that allows them to share meaningfully in the benefits of their efforts (Kahan and Rock, 2019).

Ultimately, whether pills are an effective defensive tool remains an empirical question. To test this, we examine the impact of pills on the likelihood of hedge fund interventions using updated data on hedge fund activists' interventions from Brav et al. (2018) and Boyson et al. (2022), and estimate the following empirical model:

$$\begin{aligned} Activism\,Target_{i,t} = \beta HF\,Clicks_{i,t-1,t-2} + \gamma Pill\,Adoption_{i,t-1} + \\ \delta HF\,Clicks_{i,t-1,t-2} \times Pill\,Adoption_{i,t-1} + \lambda Total\,Clicks_{i,t-1} + \\ \zeta X_{i,t-1} + \eta_i + \mu_t + \varepsilon_{i,t}, \end{aligned} \tag{2}$$

where $Activism\,Target_{i,t}$ is an indicator variable that equals one when a hedge fund files a Schedule 13D or announces a proxy fight at firm i in quarter t. A Schedule 13D filing indicates that a hedge fund has acquired more than 5% of the stock of the company and announces its intention to influence its management. We control for hedge fund clicks in the two quarters prior to, and poison pill adoptions in the quarter prior to, the Schedule 13D filing or proxy fight announcement. The wider click window allows us to capture the full sequence in which hedge fund interest triggers a pill adoption, which in turn precedes the activism decision. We are interested in the interaction between clicks and pill adoption, and interpret the coefficient as capturing the potential effect of poison pills adopted in response to hedge fund interest in prior periods, relative to other firms under hedge fund scrutiny. As in previous tables, we use firm and industry-by-year-quarter fixed effects and the same set of controls as in Column (2) in Table 4.

Table 7 reports the results. Consistent with Kirmse (2024), hedge fund clicks in quarters $t-1$ and $t-2$ are strongly related to a firm being targeted by a hedge fund (for example,

see Column (1)). On the other hand, pill adoption alone appears to correlate positively with the likelihood of an activist intervention, possibly because activists may target firms with governance structures they consider undesirable. By contrast, the interaction between poison pills and hedge fund clicks in Column (2) is negative and statistically significant at the 5% level. We interpret Column (2) as suggestive evidence that firms facing the threat of hedge fund intervention are less likely to experience a future Schedule 13D filing or proxy contest when they adopt a poison pill, relative to other firms facing a similar threat.

To deepen our analysis, Columns (3) through (6) separately examine pills with provisions designed to deter activist interventions. In particular, poison pills with trigger thresholds of 10% or lower, NOL pills, pills with acting-in-concert provisions, and pills with synthetic equity provisions are all negatively correlated with a subsequent public intervention for firms with high numbers of clicks in previous quarters.

Importantly, Column (7) of Table 7 shows that anti-activist poison pills appear particularly effective in reducing future activism events. Specifically, the interaction term between hedge fund clicks and anti-activist poison pills is -0.01 and is significant at the 1% level. This suggests that firms that experience 100 hedge fund clicks in the prior two quarters and adopt an anti-activist poison pill in the prior quarter are one percentage point less likely to experience a public activism intervention in quarter t. Such a decrease in intervention probability represents a relative decline of 54% compared to other firms with 100 hedge fund clicks but no poison pill. In other words, firms under high hedge fund scrutiny that adopt anti-activist poison pills are less likely to face activism intervention than even the typical firm facing no hedge fund threat. By contrast, Column (8) shows that non-activist pills have no deterrent effect, confirming that the result is specific to the contractual innovations documented in Section 2.

6.2 CEO Turnover

One of the main effects of hedge fund intervention, underscoring its role in disciplining managers as documented in the literature, is a higher rate of CEO turnover (Brav et al., 2008; Fos and Tsoutsoura, 2014; Fos, 2017; Choi and Gong, 2020). Accordingly, to the extent that pills are effective in reducing the likelihood of intervention, they may also reduce the

likelihood of CEO turnover. Moreover, while existing studies have focused primarily on CEO turnover following a Schedule 13D filing or a proxy contest, hedge funds may also exert pressure through private negotiations (Gantchev, 2013; Levit, 2019; Kirmse, 2024). Kirmse (2024) finds evidence that, following hedge fund engagement, the risk of CEO turnover increases even in the absence of a 13D filing or proxy contest. Thus, anti-activist pills may also affect the likelihood of CEO turnover induced by private engagement.

To test these hypotheses, we use the following empirical specification:

$$\begin{aligned} CEO\ Turnover_{i,t} = \beta HF\ Clicks_{i,t-1,t-2} + \gamma Pill\ Adoption_{i,t-1} + \\ \delta HF\ Clicks_{i,t-1,t-2} \times Pill\ Adoption_{i,t-1} + \lambda Total\ Clicks_{i,t-1} + \\ \zeta X_{i,t-1} + \eta_i + \mu_t + \varepsilon_{i,t}, \end{aligned} \tag{3}$$

where $CEO\ Turnover_{i,t}$ is an indicator variable that equals 1 if a CEO leaves the firm in quarter t, and zero otherwise. As in previous tables, we use firm and industry-by-year-quarter fixed effects and the same set of controls as in Column (2) in Table 4.

As in Table 7, the variable of interest is the interaction between hedge fund clicks and the adoption of a poison pill. Once again, we interpret this interacted coefficient as the potential effect of poison pills adopted in response to hedge funds' interest in previous periods, relative to other firms under hedge fund threat.

Table 8 reports the results. Consistent with Brav et al. (2008) and others, hedge fund interest is positively related to the likelihood of CEO turnover in the subsequent quarter (e.g., see Column (1)). The adoption of any poison pill, on the other hand, appears to have little effect on this likelihood, whether on its own or following heavy hedge fund interest.

Once again, however, a different pattern emerges when considering pills with anti-activist features. In particular, both NOL pills (Column (4)) and the group of all anti-activist pills (Column (7)) appear particularly effective in lowering the probability of CEO dismissal following hedge fund attention. For example, the interaction term between hedge fund clicks and NOL pills is -0.009 and is significant at the 5% level. This suggests that firms that experience 100 hedge fund clicks and adopt an NOL pill are 32% less likely to replace current management than other firms with 100 hedge fund clicks but no poison pill.

Finally, Column (8) examines non-activist poison pills. In contrast to anti-activist poison

pills, the likelihood of CEO turnover is more than twice as high following the adoption of non-activist pills relative to non-adopting firms under hedge fund threat. Overall, Table 8 indicates that anti-activist poison pills are associated with lower CEO turnover risk under hedge fund pressure.

Moreover, these results help explain why boards adopt pills despite the potential career costs for directors (Johnson et al., 2024). As we show in Table IA.8, directors face a similarly high dismissal risk when confronted with a hedge fund intervention, and an even greater risk in a proxy contest. This evidence suggests that, *ex ante*, a director seeking to preserve board service may view siding with the CEO and adopting a pill as the optimal response to activism. Given the importance of CEO networks to directors' future positions (see Kim et al., 2023), supporting the incumbent CEO may improve directors' longer-run labor-market outcomes, even if it increases near-term dismissal risk following pill adoption.

7 Anti-Activist Poison Pills and Real Outcomes

This section compares firms that adopt anti-activist poison pills with firms that experience hedge fund interventions. We first examine corporate policy adjustments and operating performance, and then turn to market reactions and stock price performance. Together, these results help assess whether deterring activism preserves longer-term, investment-oriented policies and how investors view such pills on average.

7.1 Corporate Policies and Operating Performance

This subsection examines corporate policy adjustments following anti-activist poison pill adoptions relative to firms that experience an activist intervention. Prior studies on hedge fund activists have found that targeted firms experience an increase in leverage (Gantchev et al., 2019), a decrease in cash (Fos, 2017; Gantchev et al., 2019), a decrease in investment in capital expenditures, and an increase in payouts to equity holders (Fos, 2017; Gantchev et al., 2019; Maffett et al., 2022).

To the extent that anti-activist poison pills discourage activist intervention, we conjecture that firms adopting such pills are less likely to adjust these corporate policies than firms

that do not and subsequently experience an intervention. Table 9 presents the results of a difference-in-differences (DiD) comparison between anti-activist pill adopters and hedge fund activism targets. Specifically, we compare the 12 quarters before and after the event for firms that either adopt pills or become activist targets, but not both, with a group of control firms that experience neither.

Our empirical specification uses a stacked methodology (Gormley and Matsa, 2011) to address issues created by including already "treated" firms in the control group (see De Chaisemartin and d'Haultfoeuille, 2020; Callaway and Sant'Anna, 2021; Goodman-Bacon, 2021; Sun and Abraham, 2021; Baker et al., 2022). We include firm-cohort fixed effects and industry-quarter-cohort fixed effects, and cluster our standard errors at the firm level.

The outcome variables of interest in Table 9 include investment (capital expenditures), sales growth, share repurchases, cash, leverage, and ROA. Consistent with prior studies (Brav et al., 2008; Fos, 2017; Gantchev et al., 2019; Maffett et al., 2022), firms that experience a public activism intervention in our sample decrease investment and increase share buybacks relative to the pill-adopting firms. In contrast, firms that adopt anti-activist poison pills experience no such increases in payouts and actually *increase* capital expenditures. Likewise, these firms tend to hold more cash and maintain lower leverage compared to firms that experience an activist intervention. Moreover, with the exception of sales growth and repurchases, the coefficients on *Anti-Activist Poison Pill*×*Post* and *HF Target*×*Post* are significantly different from each other at least at the 10% level.

Accordingly, pill-adopting firms appear to exhibit outcomes opposite to those following activist intervention. Taken together, the results in Table 9 are consistent with the view that firms adopting anti-activist poison pills do not adjust their corporate policies in the same way as hedge fund-targeted firms. To the extent that such pill-adopting firms would otherwise have been targeted, we interpret the evidence as suggestive that pill adoption reduces the likelihood that an activist intervention successfully achieves its typical demands. These results provide additional evidence that poison pills affect the bargaining dynamics between hedge funds and incumbent management.

Finally, Column (6) of Table 9 reports results for return on assets, which provides evidence on whether these corporate policies translate into stronger performance. Pill adopters

experience a statistically significant increase in ROA of 0.9 percentage points in the post-adoption period, while activism targets show no comparable improvement. The difference between the two groups is strongly significant, suggesting that the policies boards pursue following the adoption of anti-activist pills are associated with better long-term performance.

7.2 Market Reactions and Stock Price Performance

The corporate-policy and operating-performance results raise the question of how investors view anti-activist poison pills. On the one hand, public activist interventions are often associated with positive announcement returns. On the other hand, the evidence above suggests that firms that adopt anti-activist pills and do not subsequently experience an activist intervention preserve higher investment and lower payouts and exhibit stronger subsequent operating performance. We therefore examine whether investors view such pills as value-reducing entrenchment devices or as a potentially value-enhancing response to activist threats.

Figure 4 plots cumulative abnormal returns (CARs) over a [-10,+10] trading day window around anti-activist pill adoptions, alongside CARs around Schedule 13D filings by activist hedge funds. To isolate the effect of activism-related events, we exclude pill adoptions and 13D filings that occur within one quarter of a takeover bid. CARs are constructed using a market model with an estimation window of day -250 through day -64.

Anti-activist pill adoptions are associated with modestly positive cumulative abnormal returns. CARs are essentially flat before the event and drift upward to roughly 1% to 2% over the post-adoption window. This finding suggests that investors view the adoption of anti-activist pills favorably on average. It is also broadly consistent with the view that the market is receptive to the board's longer-term policies, such as greater investment and lower payouts, and anticipates the subsequent increase in profitability. At the same time, we cannot entirely rule out the possibility that the market uses pill adoption as a signal of a potential hedge fund threat and reacts positively to that possibility.

To further assess anti-activist pills, we examine longer-run stock price performance. Table 10 reports calendar-time portfolio results for firms that adopt anti-activist pills. Firms that later adopt such pills exhibit significantly negative abnormal returns before adoption,

with equal-weighted and value-weighted four-factor alphas of -1.11% and -0.56% per month, respectively, over the [-36,-1] month window. This pattern is consistent with pill adopters being relatively weak performers ex ante and therefore more likely to attract hedge fund attention.

After adoption, performance improves. In the equal-weighted portfolio, the alpha becomes less negative and is statistically indistinguishable from zero over the [+1,+60] month window. In the value-weighted portfolio, the alpha turns positive and statistically significant, reaching 0.62% per month over the [+1,+60] month window. Thus, while pill adopters appear to be underperforming firms before adoption, their longer-run stock performance improves thereafter, especially among larger firms.

Taken together, the event-study and calendar-time evidence suggest that anti-activist pills are associated with positive stock price performance. These results are consistent with the corporate-policy evidence suggesting that pill adopters pursue a longer-term strategy that accompanied into higher profitability.

It is important to emphasize that these results are also consistent with the view that hedge fund activism is value-enhancing overall. As shown in Figure 4, we replicate for comparison the well-known positive returns around 13D filings of roughly 5% by day +10, which are substantially larger than the market reaction to pill adoption. We interpret these findings as consistent with the idea that no single prescription is optimal for every firm: some firms benefit from activist intervention, while others benefit from boards protecting a longer-term strategy. The market equilibrium reflects both forms of value-enhancing governance responses.

8 Robustness and Extensions

To mitigate concerns about alternative mechanisms and to confirm that our results reflect firm responses to the threat of hedge fund interest, we conduct several additional robustness tests and extensions of the baseline results.

First, we address a possible critique that pills are inconsequential because they are mainly used by small firms, as hedge funds rarely accumulate significant stakes in larger firms. Table

IA.B.1 provides summary statistics on average hedge fund holdings across different terciles of firm size. Holdings range from 7.84% to 11.96%, in line with Brav et al. (2022b). As expected, initial hedge fund stakes are largest in smaller firms (the smallest tercile). However, the difference in holdings between the smallest and largest tercile has decreased in the most recent period. While the difference in the 2003–2007 period was 1.85 percentage points, it has decreased to a statistically insignificant 0.87 percentage points in 2013–2017, the period when anti-activist pills proliferated (see Figures 1 and 3). This effect is not driven by firms becoming smaller over time. Table IA.B.2 shows that both the average and median market capitalization of the largest tercile of firms have increased since 2003.

Moreover, Table IA.9 shows subsample splits of our main regression. We find that hedge fund attention significantly predicts pill adoption only in the sample of larger firms. Figure IA.7 presents the unconditional size distributions of pill-adopting firms, showing that anti-activist pill adopters are larger than the typical firm, while non-activist pill adopters tend to be smaller. We interpret the stronger results for large firms as reflecting differences in monitoring capacity: large firms are more likely to retain costly stock-surveillance services (Society for Corporate Governance, 2020). Moreover, because the dollar value of stakes in large firms is often larger, even if the percentage holding is smaller, they can trigger Hart–Scott–Rodino filings and give the firm information about small stakes without triggering a Schedule 13D filing, making them better positioned to detect and respond to early-stage activist interest (Society for Corporate Governance, 2020; Bishop et al., 2026). Accordingly, the results in the paper are not driven by small firms.

Second, we address the concern that our results are driven by takeover threats rather than hedge fund activism. We re-estimate the main specifications in Tables 4 and 7 after excluding all quarters in which a firm is subject to a takeover bid or is rumored to be a target, as well as adjacent quarters. For takeover bid data, we rely on SDC Thomson Reuters, while takeover rumors are manually coded following the methodology of Ahern and Sosyura (2014). Tables IA.10 and IA.11 show that the results are qualitatively unchanged.

Moreover, we decompose hedge fund clicks by activist objective and by whether prior campaigns resulted in completed sales (Table IA.12). No single objective accounts for the entirety of the results, and clicks by funds that never pursue sales remain predictive of pill

adoption. Together, these tests confirm that the relationship between hedge fund attention and anti-activist pill adoption reflects a response to activism risk rather than latent takeover vulnerability.

Third, we address the concern that hedge fund clicks are caused by the campaign, and pills are implemented after the campaign has already begun. We re-estimate the specification in Table 5 after excluding firms with a public campaign in the year prior to pill adoption, to ensure that clicks are not simply a byproduct of an already-initiated campaign. The results remain statistically significant and similar in magnitude (Table IA.13).

Fourth, we examine whether alternative defensive tactics explain our results. Classified boards make it harder for challengers to replace a majority of directors, but hedge funds rarely seek board majorities, typically aiming to appoint one or two representatives. Advance notice bylaws require shareholders to provide additional notice of proposals but are unlikely to meaningfully alter an activist's strategy. Thus, neither is likely to materially deter an activist intervention (see Section IA.A.1 of the Internet Appendix). Tables IA.14 and IA.15 provide support for this view: there is no systematic evidence that classified boards and advance notice bylaws offer incremental protection from activism beyond that of a poison pill.

A related question is whether firms coordinate the adoption of multiple defensive measures, or whether the relationship between hedge fund attention and pill adoption depends on the presence of other defenses. Table IA.16 tests both possibilities. Columns (1) through (4) show that hedge fund clicks do not predict the concurrent adoption of a classified board or advance notice bylaw alongside a poison pill, suggesting that firms do not coordinate the timing of multiple defenses in response to activist threats. Columns (5) through (8) interact hedge fund clicks with the presence of a classified board or advance notice bylaw; these interaction terms are uniformly small and statistically insignificant, indicating that the relationship between hedge fund attention and pill adoption does not depend on the firm's existing defensive posture. Together, these results suggest that anti-activist pills operate as standalone defenses rather than as part of a coordinated portfolio of defensive measures.

Fifth, Tables IA.17 and IA.18 provide evidence that the main results in Tables 4 and 7 are robust to using the number of unique hedge funds clicking, rather than the total number

of hedge fund clicks. This ensures that our results are not driven solely by individual hedge funds repeatedly clicking on firms' disclosures but also capture potential targeting by multiple hedge funds, often referred to as wolf packs (Brav et al., 2022a).

Finally, we examine whether terminating an active poison pill has the opposite effect, increasing a firm's exposure to hedge fund activism. The full analysis is presented in Internet Appendix Section IA.C, and we summarize the key findings here. Using a regression discontinuity design around shareholder proposals to remove poison pills, we exploit the 50% vote-share threshold that determines whether such proposals pass (Cuñat et al., 2012; Ertimur et al., 2013). Among 110 termination proposals, narrowly passing proposals are associated with a sharp increase in both hedge fund clicks and public campaigns in the four quarters following the vote (Figure IA.9). Placebo tests confirm that this effect is specific to pill termination rather than a general response to governance proposals (Figures IA.11 and IA.12). While power is limited given the small number of termination proposals, the RD evidence reinforces the adoption results: just as adopting a pill reduces activism exposure, removing one increases it.

9 Conclusion

Since their inception in the 1980s, poison pills have been viewed as the preeminent anti-takeover device. In the last decade, however, they have increasingly been used to discourage activist investors. We compile a comprehensive database of poison pill provisions and provide new evidence of dramatic shifts in their design features—including declining trigger thresholds, acting-in-concert provisions, and synthetic equity clauses that specifically target hedge fund accumulation. Using SEC log file data to proxy for hedge fund threats, we show that the threat of intervention significantly increases the probability that a firm will adopt an anti-activist poison pill in the following quarter. These pills appear effective: following adoption, firms are less likely to face a public hedge fund campaign or experience CEO turnover, and these patterns are concentrated in pills with anti-activist provisions rather than traditional high-trigger pills.

We show suggestive evidence that anti-activist pills are adopted to facilitate the pursuit

of a longer-term strategy. Relative to firms that undergo activist interventions without a pill, firms adopting anti-activist pills maintain higher investment and lower payouts. These policy differences are accompanied by stronger operating performance, with pill adopters exhibiting higher return on assets following adoption relative to activism targets. Finally, we document roughly similar patterns in stock-price performance: anti-activist pill adoptions are accompanied by modestly positive announcement returns, and calendar-time portfolio evidence indicates improved long-term stock performance.

These findings suggest that anti-activist pills need not come at shareholders' expense. Together with the well-known positive association between activism and shareholder value, they suggest that the optimal allocation of control between activists and boards is context dependent rather than governed by a single optimal regime, and that the observed market outcomes are, on average, value-enhancing.

Our analysis captures a period of rapid co-evolution in pill design and activist strategies. The rise of anti-activist pills has coincided with a shift toward negotiated settlements rather than confrontational campaigns (Bebchuk et al., 2020). This pattern suggests that pills do not eliminate activism but instead redirect it toward less adversarial engagement, analogous to how anti-takeover pills in the 1980s reduced hostile bids while channeling transactions toward negotiated deals. At the same time, it is also possible that activist adaptation could reduce the effectiveness of current pill designs.

However, the continued proliferation of new contractual features documented in this paper suggests that boards continue to innovate in defending against activists. More broadly, the evolution of the poison pill underscores the dynamic and adaptable nature of governance provisions in shaping the balance of power between managers and shareholders.

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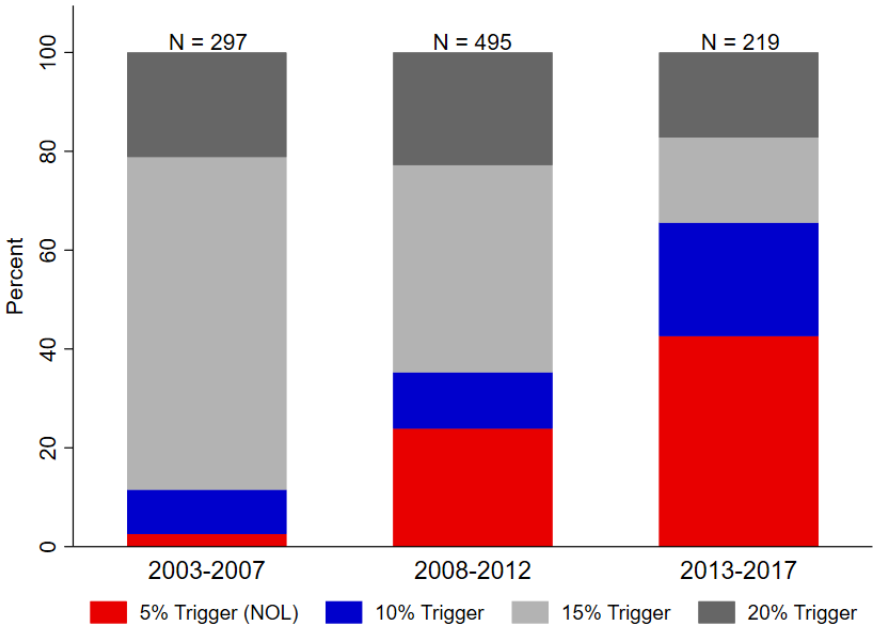
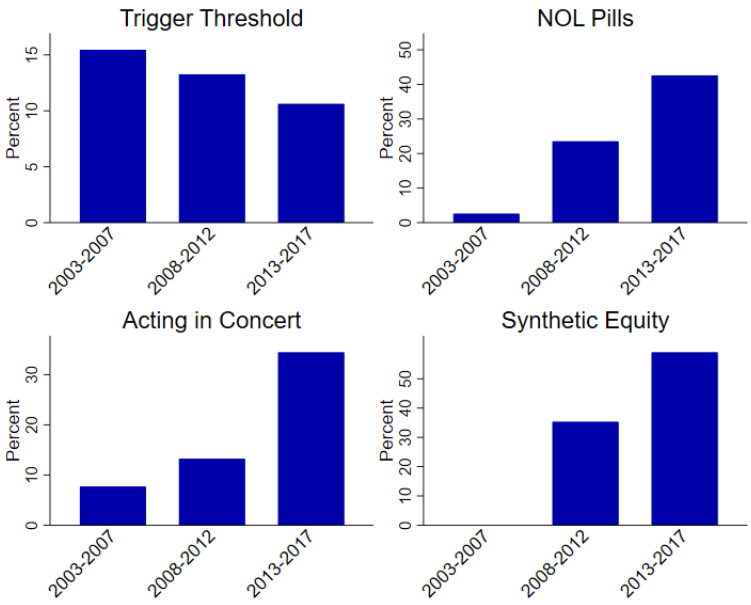
Figure 1: The Evolution of Poison Pills. This figure depicts the evolution in the characteristics and provisions of poison pills through time. Panel A depicts the distribution of trigger thresholds, Panel B depicts the prevalence of provisions that appear to target activist hedge funds, Panels C and D depict the prevalence of acting-in-concert and synthetic equity provisions in pills that have a low trigger threshold, respectively. Data on poison pill characteristics and provisions is hand-collected from firm SEC filings as described in Section 2. All variables are defined in Appendix Table A.1.

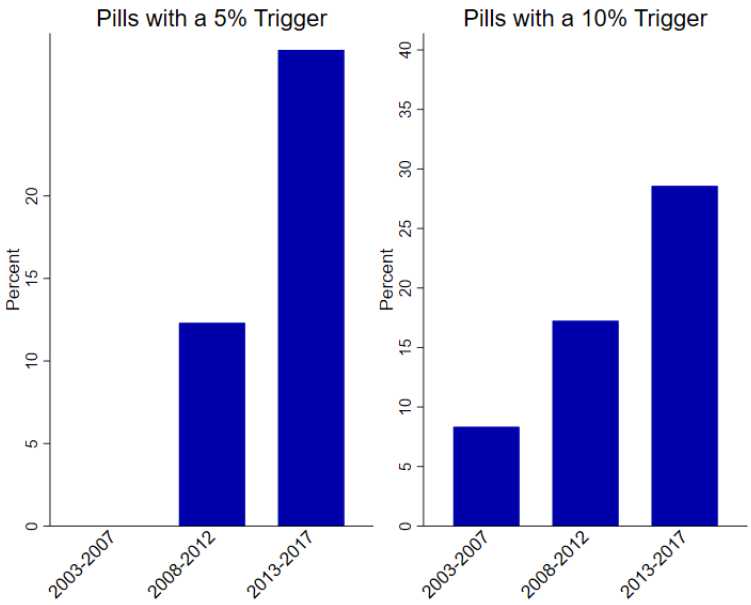
(A) Trigger Thresholds through Time.



(B) Anti-Activist Provisions through Time.



(C) Acting-in-Concert Provisions in Pills with Low Trigger Thresholds.



(D) Synthetic Provisions in Pills with Low Trigger Thresholds.

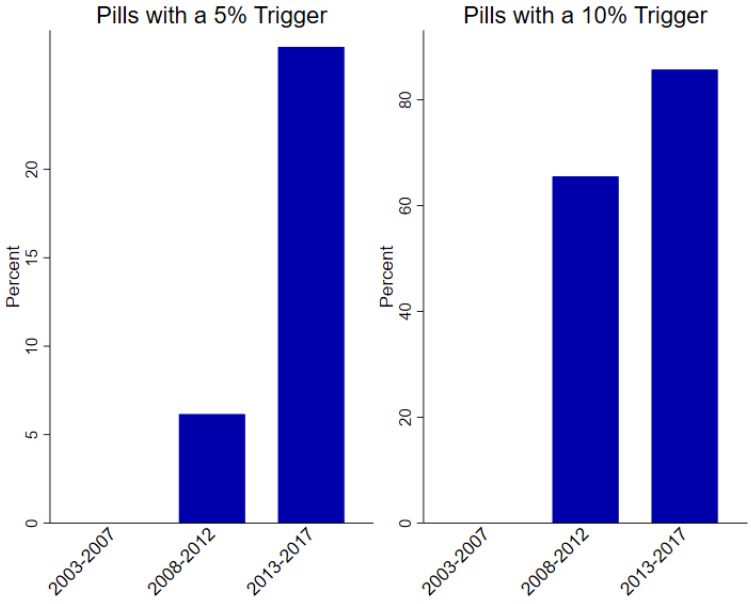


Figure 2: Clicks Surrounding New Pill Adoptions. This figure depicts the average number of hedge fund clicks for firms that adopt new poison pills. The x-axis represents event time, where t=0 represents the quarter the firm adopts the pill. The quarters are based on buckets of 90 days such that t=0 includes days 0 through 90, where the pill is adopted on day 0. In this way, all hedge fund clicks at quarter t=0 represent views on or after the day of adoption, but not before it. The red dots depict activist HF clicks, whereas the blue squares depict nonactivist HF clicks. Data on poison pills is hand-collected from firm SEC filings as described in Section 2, and data on hedge fund clicks is collected via the methodology described in Internet Appendix Section IA.B.1. All variables are defined in Appendix Table A.1.

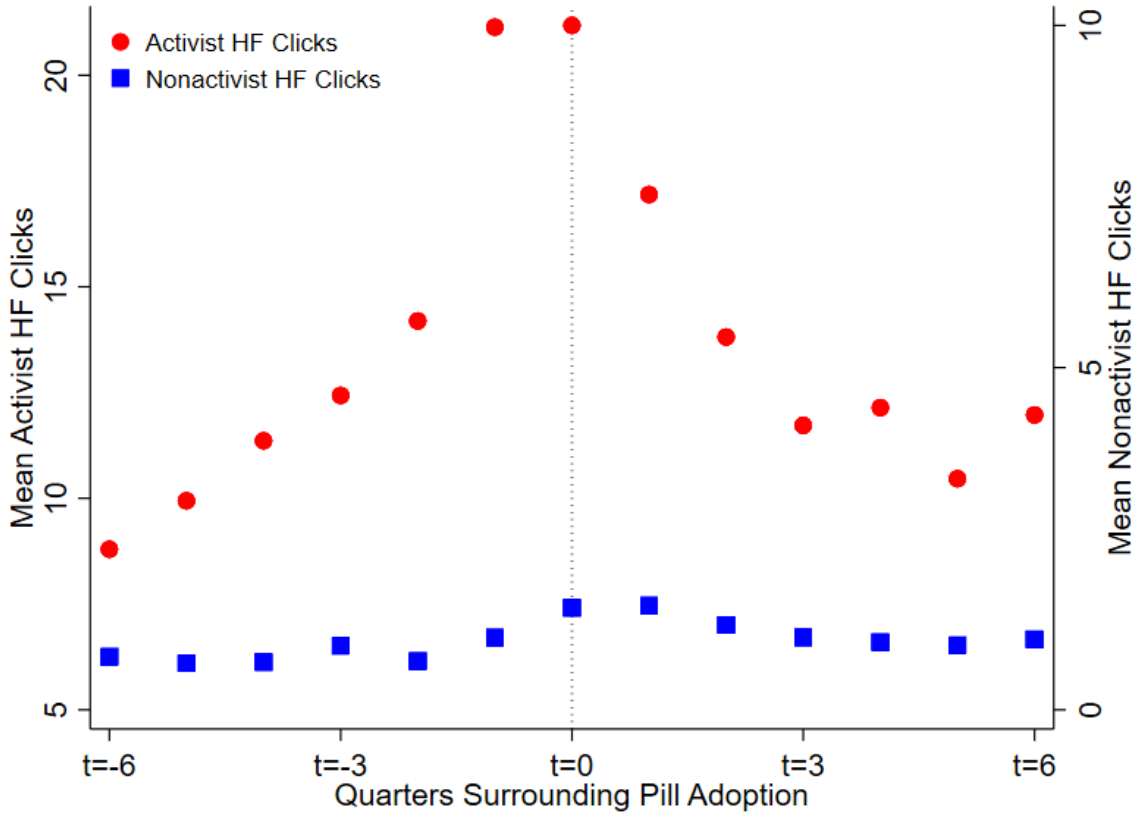


Figure 3: Poison Pill Adoptions Through Time. This figure depicts the number of poison pills adopted through time and the number of hostile activist interventions. In particular, the grey bars represent all adoptions, whereas the red bars represent pills with a trigger threshold less than or equal to 10%, and the dashed black line represents the number of hostile activist interventions. Data on poison pills is hand-collected from firm SEC filings as described in Section 2 and data on hostile activist interventions is from Bebchuk et al. (2015) and was graciously shared by Alon Brav and Wei Jiang. All variables are defined in Appendix Table A.1.

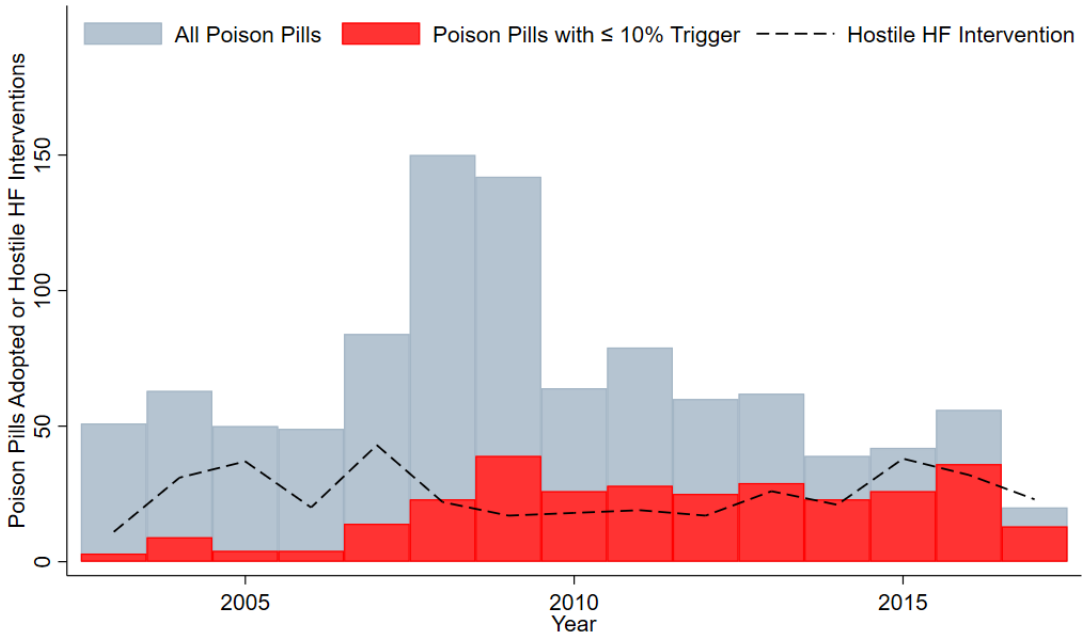


Figure 4: Cumulative Abnormal Return for Anti-Activist Poison Pill Adoptions. This figure depicts cumulative abnormal returns surrounding the public announcement of an anti-activist poison pill adoption (blue line) and the filing of a form 13D (red line). CARs are constructed using a market model with an estimation window of day -250 through day -64. Data on poison pill adoptions is hand-collected from firm SEC filings following the process described in Section 2, data on stock returns is from CRSP, and data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang. All variables are defined in Appendix Table A.1.

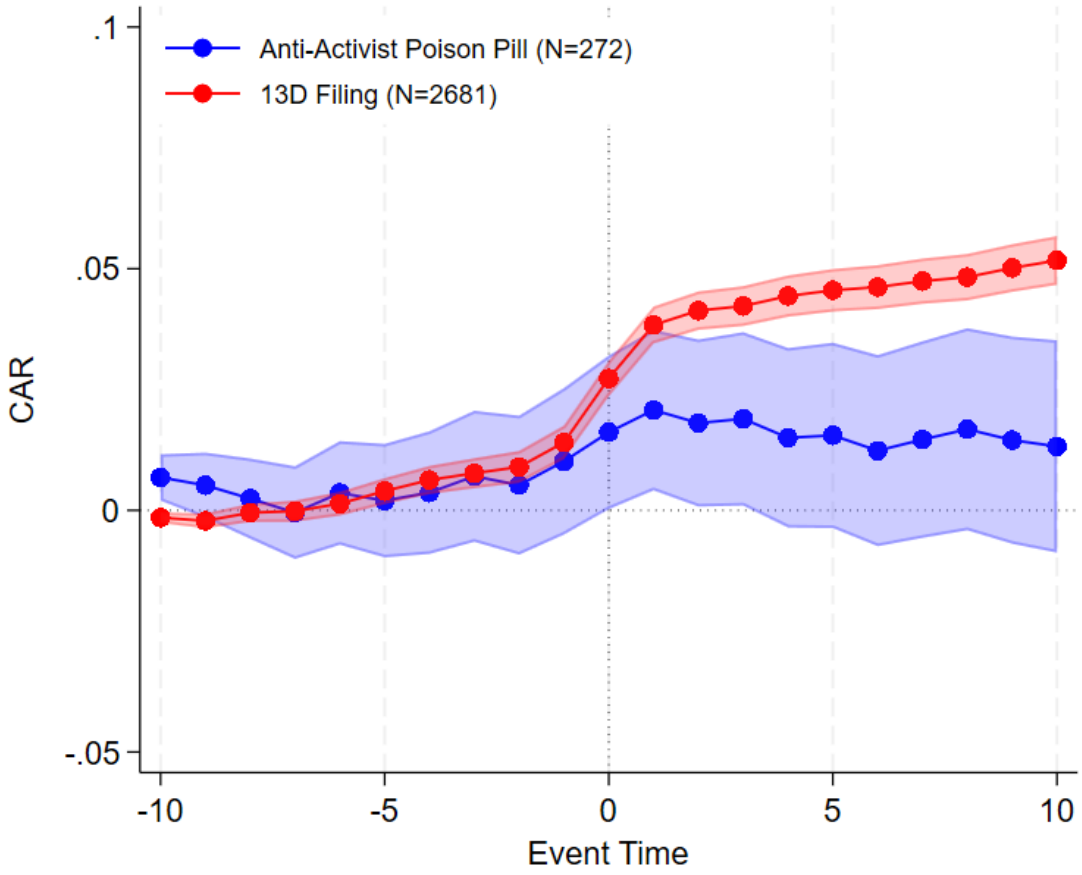


Table 1: Summary Statistics. This table reports the summary statistics for the main variables included in our analysis. All variables are defined in Table A.1. Data on poison pill adoptions is hand-collected from firm SEC filings as described in Section 2, data on hedge fund clicks is collected via the methodology described in Internet Appendix Section IA.B.1, data on firm financials is from CRSP/Compustat Merged Quarterly, data on board and director characteristics is from BoardEx, data on classified boards is from Guernsey et al. (2024), and data on advance notice bylaws is from Factset. The number of observations for the board characteristics is lower because of slightly worse coverage from BoardEx.

	N	Mean	P25	Median	P75	SD
Poison Pill Adoption (%)	175,122	0.577	0.000	0.000	0.000	7.576
Hedge Fund Clicks	175,122	10	0	2	9	29
Total Clicks	175,122	1,835	400	924	2,009	4,345
Total Assets ($ Ms)	175,122	7,936	126	546	2,145	70,386
Market Leverage	175,122	0.228	0.009	0.151	0.373	0.242
Cash Holdings (% of assets)	175,122	0.205	0.036	0.106	0.294	0.234
Capital Expenditures (% of assets)	175,122	0.023	0.003	0.010	0.027	0.036
R&D Expense (% of assets)	175,122	0.014	0.000	0.000	0.014	0.030
Net Operating Loss (NOL) (% of assets)	175,122	0.495	0.000	0.001	0.164	1.530
Return on Assets (%)	175,122	0.001	-0.002	0.011	0.028	0.060
Quarterly Stock Return (%)	175,122	0.009	-0.011	0.001	0.014	0.670
Tobin's q	175,122	1.59	0.67	1.11	1.91	1.59
Dividend Yield	175,122	0.002	0.000	0.000	0.003	0.005
Years since IPO	175,122	18	7	14	24	16
I(Classified board)	175,122	0.499	0.000	0.000	1.000	0.500
Institutional ownership	175,122	0.546	0.248	0.600	0.840	0.326
I(CEO-Chair)	167,246	0.481	0.000	0.000	1.000	0.500
Board size	167,246	8	7	8	10	3
Pct. Independent Director	167,246	0.753	0.667	0.778	0.857	0.139
I(Advance Notice Bylaw)	175,122	0.328	0.000	0.000	1.000	0.469

Table 2: Poison Pill Provisions Summary Statistics. This table reports the percentages of poison pills that include the different characteristics and provisions discussed in Section 2. Further, this table displays differences in these percentages based on the number of hedge fund clicks for the firm in the quarter preceding the pill adoption. Data on poison pill adoptions are hand-collected from firm SEC filings, and data on hedge fund clicks are collected via the methodology described in Internet Appendix Section IA.B.1. All variables are defined in Appendix Table A.1.

		Hedge Fund Clicks$_{t-1}$			Differences					
	All	0 clicks	(0,99th)	[99th,100th]	Diff.	T-stat	Diff.	T-stat	Diff.	T-Stat
		(1)	(2)	(3)	(2) − (1)		(3) − (2)		(3) − (1)	
Trigger (%)	14.0	15.2	13.6	10.1	-1.6	-4.8***	-3.6	-4.1***	-5.2	-6.5***
NOL pill	16.9	8.0	20.2	33.3	12.2	5.2***	14.9	2.2**	27.1	5.3***
Acting-in-Concert provision	13.2	11.6	12.6	38.9	1.0	0.5	27.9	4.9***	29.0	4.9***
Synthetic Equity	22.9	15.5	24.6	61.1	9.2	3.5***	34.8	4.8***	44.0	6.8***

Table 3: Simple Tests of Differences. This table compares means and medians for anti-activist pill-adopting firms (Panel A) and hedge fund targets (Panel B) in the quarter of the respective corporate event (e.g., anti-activist pill adoptions or the announcement of a public activism campaign) relative to all other quarters. Column (5) reports the T-Statistic from a two-sample test of difference in means and Column (6) reports the Mann-Whitney U-Statistic from a rank sum test of difference in medians. All variables are defined in Table A.1. Data on poison pill adoptions is hand-collected from firm SEC filings, data on hedge fund clicks is collected via the methodology described in Internet Appendix Section IA.B.1, data on the objectives of activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson and Wei Jiang, and data on firm financials is taken from CRSP/Compustat Merged Quarterly.

Panel A: Quarters with Anti-Activist Poison Pill Adoptions

	Anti-Activist Pill		No Anti-Activist Pill		Tests of Differences	
	Mean (a)	Median (b)	Mean (c)	Median (d)	T-Stat (a− c)	U-Stat (b− d)
Hedge Fund Clicks	40.6	13	11.2	2	-19.2***	-37.8***
Total Clicks	3988.1	2520	1974.4	1025	-22.7***	-66.7***
Total Assets (Ms)	14859.6	968	8144.4	572	-2.4**	-20.6***
Market Leverage	0.368	0.338	0.229	0.152	1.0	0.4
Cash Holdings (% of assets)	0.223	0.146	0.203	0.106	5.7***	-2.5**
Capital Expenditures (% of assets)	0.025	0.009	0.024	0.011	-1.1	-2.2**
R&D Expense (% of assets)	0.011	0.000	0.014	0.000	1.7*	-4.2***
Net Operating Loss (NOL) (% of assets)	1.469	0.209	0.514	0.002	-4.0***	-15.4***
Return on Assets(%)	-0.012	0.002	0.001	0.011	-9.3***	-9.6***
Quarterly Stock Return (%)	0.004	-0.000	0.003	0.001	19.1***	13.5***
Tobin's q	1.1	0.9	1.6	1.1	4.8***	-0.6
Dividend Yield	0.002	0.000	0.002	0.000	-10.6***	-11.2***
Years since IPO	22.7	17	18.7	14	-31.6***	-42.7***
I(Classified board)	0.368	0	0.495	0	7.4***	7.4***
Institutional ownership	0.534	0.611	0.557	0.618	-29.7***	-29.9***
I(CEO-Chair)	0.390	0	0.474	0	8.4***	8.4***
Board size	8.8	8	8.3	8	-2.2**	-6.1***
Pct. Independent Director	0.812	0.833	0.759	0.800	-37.6***	-34.3***
I(Advance Notice Bylaw)	0.346	0	0.336	0	-22.4***	-22.4***

Panel B: Quarters with Activist Hedge Fund Targets

	HF Target		No HF Target		Tests of Differences	
	Mean (a)	Median (b)	Mean (c)	Median (d)	T-Stat (a− c)	U-Stat (b− d)
Hedge Fund Clicks	22.2	5	11.1	2	-12.6***	-30.3***
Total Clicks	2817.0	1332	1966.0	1023	-18.2***	-58.7***
Total Assets (Ms)	5571.4	408	8188.5	576	-3.1***	-21.9***
Market Leverage	0.255	0.175	0.229	0.152	1.9*	0.5
Cash Holdings (% of assets)	0.206	0.118	0.203	0.106	5.3***	-1.7*
Capital Expenditures (% of assets)	0.026	0.013	0.024	0.011	-0.1	-0.1
R&D Expense (% of assets)	0.013	0.000	0.014	0.000	1.2	-3.4***
Net Operating Loss (NOL) (% of assets)	0.568	0.023	0.514	0.002	-4.3***	-12.5***
Return on Assets(%)	-0.003	0.005	0.001	0.011	-9.5***	-12.4***
Quarterly Stock Return (%)	0.001	0.000	0.003	0.001	16.4***	11.2***
Tobin's q	1.2	1.0	1.6	1.1	1.0	-3.5***
Dividend Yield	0.002	0.000	0.002	0.000	-12.5***	-13.8***
Years since IPO	18.5	15	18.7	14	-29.7***	-40.0***
I(Classified board)	0.470	0	0.495	0	6.4***	6.4***
Institutional ownership	0.590	0.644	0.557	0.618	-25.2***	-25.5***
I(CEO-Chair)	0.438	0	0.475	0	6.7***	6.7***
Board size	8.2	8	8.3	8	-3.2***	-6.4***
Pct. Independent Director	0.779	0.800	0.759	0.800	-32.6***	-29.5***
I(Advance Notice Bylaw)	0.253	0	0.337	0	-24.1***	-24.1***

Table 4: Hedge Fund Interest and Poison Pill Adoptions. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if the firm adopts a poison pill in quarter t, and 0 otherwise. The sample includes firm-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. The main independent variable of interest is *Hedge Fund Clicks*, which is equal to the number of views of SEC public filings (clicks) by activist hedge funds in quarter $t-1$. The table further reports results using an indicator variable for when the number of hedge fund clicks crosses the 99th percentile threshold. All variables are defined in Table A.1. Data on poison pill adoptions is hand-collected from firm SEC filings, data on hedge fund clicks is collected via the methodology described in Internet Appendix Section IA.B.1, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	Pill Adoption$_t$ (Indicator)			
	(1)	(2)	(3)	(4)
Hedge Fund Clicks$_{t-1}$ (100s)	0.003***	0.004***	0.004***	
	(0.001)	(0.001)	(0.001)	
I(Hedge Fund Clicks$_{t-1} \geq$ P99)				0.007**
				(0.003)
Total Clicks$_{t-1}$ (100,000s)	0.004	0.007	0.007	0.011
	(0.007)	(0.007)	(0.007)	(0.008)
log(Book assets$_{t-1}$)		-0.003***	-0.003***	-0.003***
		(0.001)	(0.001)	(0.001)
Market leverage$_{t-1}$		0.006**	0.004*	0.006**
		(0.003)	(0.003)	(0.003)
Cash/book assets$_{t-1}$		0.006*	0.007**	0.006*
		(0.003)	(0.003)	(0.003)
Capex/ppe$_{t-1}$		0.005**	0.005**	0.005**
		(0.002)	(0.002)	(0.002)
R&D expense/book assets$_{t-1}$		-0.027	-0.035	-0.027
		(0.021)	(0.021)	(0.021)
NOL/book assets$_{t-1}$		0.058	0.077*	0.058
		(0.039)	(0.042)	(0.039)
ROA$_{t-1}$		-0.257***	-0.256***	-0.258***
		(0.079)	(0.083)	(0.079)
Quarterly return$_{t-1}$		-0.001	-0.001	-0.001
		(0.001)	(0.001)	(0.001)
Tobin's q_{t-1}		-0.010***	-0.011***	-0.010***
		(0.003)	(0.003)	(0.003)
Dividend yield$_{t-1}$		-0.063	-0.114*	-0.062
		(0.064)	(0.061)	(0.065)
Firm age$_{t-1}$		0.033**	0.013*	0.032**
		(0.013)	(0.008)	(0.013)
I(Classified board$_{t-1}$)		0.001	0.000	0.001
		(0.001)	(0.001)	(0.001)
Institutional ownership$_{t-1}$		0.002	0.001	0.002
		(0.002)	(0.002)	(0.002)
I(CEO-Chair$_{t-1}$)			0.000	
			(0.001)	
log(Board size$_{t-1}$)			-0.001	
			(0.002)	
Pct independent$_{t-1}$			0.004	
			(0.003)	
I(Advance Notice Bylaw$_{t-1}$)			-0.003	
			(0.002)	
Firm FE	Yes	Yes	Yes	Yes
Industry × Quarter FE	Yes	Yes	Yes	Yes
$\bar{y}$	0.0058	0.0058	0.0058	0.0058
Observations	175,122	175,122	167,145	175,122
R^2	0.10	0.10	0.10	0.10

Table 5: Hedge Fund Interest and Anti-Activist Pill Adoptions. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if the firm adopts a poison pill with various characteristics (e.g., plans with trigger thresholds under 10%, NOL pills, etc.) in quarter t, and 0 otherwise. The sample includes firm-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. The main independent variable of interest is *Hedge Fund Clicks*, which is equal to the number of views of SEC public filings (clicks) by activist hedge funds in quarter $t-1$. The characteristics and provisions considered in this table are described in Section 2. All variables are defined in Table A.1. Data on poison pill adoptions is hand-collected from firm SEC filings, data on hedge fund clicks is collected via the methodology described in Internet Appendix Section IA.B.1, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	Anti-Activist Provisions				
Poison Pill Type =	I(Trigger $\leq 10\%$)	NOL	AIC	Synthetic equity	Anti-Activist
	(1)	(2)	(3)	(4)	(5)
Hedge Fund Clicks$_{t-1}$ (100s)	0.003***	0.002**	0.002**	0.003***	0.003***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Total Clicks$_{t-1}$ (100,000s)	0.003	0.005	-0.001	-0.002	0.005
	(0.006)	(0.006)	(0.002)	(0.002)	(0.006)
Controls	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes
Industry × Quarter FE	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0017	0.0010	0.0008	0.0014	0.0014
Observations	175,122	175,122	175,122	175,122	175,122
R^2	0.11	0.12	0.12	0.10	0.12

Table 6: Omitted Variables and Selection Bias. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if the firm adopts a poison pill with various characteristics (e.g., renewals, anti-activist, or non-activist) in quarter t, and 0 otherwise. The sample includes firm-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. Panel A explores a number of placebo tests. The main independent variables in columns (1) and (2) are activist HF clicks, and *non*-activist HF clicks in column (3). The main independent variables in columns (4) through (6) are activist HF clicks on close competitors of the firm. Each subgroup of hedge fund clicks is scaled by its respective standard deviation in order to readily compare the coefficients. Panel B explores the introduction of plausibly exogenous variation by interacting the main independent variable of interest (*Hedge Fund Clicks*) with the commercial and industrial loan spread (*C&I Rate Spread*), and an indicator variable equal to one during the financial crisis (*I(FC)*). All variables are defined in Table A.1. Data on poison pill adoptions is hand-collected from firm SEC filings, data on hedge fund clicks is collected via the methodology described in Internet Appendix Section IA.B.1, data on the federal funds rate and NBER recession indicators for the financial crisis are from the St. Louis FRED, and data on firm financials is from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

Panel A: Placebo Tests

	Pill Adoption$_t$ (Indicator)					
Poison Pill Type =	Non-Activist	Renewal	All			
	(1)	(2)	(3)	(4)	(5)	(6)
Hedge Fund Clicks$_{t-1}$ (Norm.)	0.0002	0.0001	0.0011***	0.0011***	0.0011***	0.0011***
	(0.0002)	(0.0001)	(0.0004)	(0.0004)	(0.0004)	(0.0004)
Nonactivist HF Clicks$_{t-1}$ (Norm.)			0.0001			
			(0.0002)			
Closest Competitor HF Clicks$_{t-1}$ (Norm.)				-0.0000		
				(0.0002)		
3 Closest Competitors HF Clicks$_{t-1}$ (Norm.)					0.0001	
					(0.0003)	
5 Closest Competitors HF Clicks$_{t-1}$ (Norm.)						-0.0001
						(0.0004)
Total Clicks$_{t-1}$ (100,000s)	0.0025	-0.0016	0.0070	0.0073	0.0072	0.0073
	(0.0030)	(0.0020)	(0.0069)	(0.0069)	(0.0069)	(0.0069)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0044	0.0015	0.0058	0.0058	0.0058	0.0058
Observations	175,122	175,122	175,122	175,122	175,122	175,122
R^2	0.10	0.10	0.10	0.10	0.10	0.10

Panel B: Plausibly Exogenous Variation

	All	Anti-Activist	Non-Activist	All	Anti-Activist	Non-Activist
	(1)	(2)	(3)	(4)	(5)	(6)
Hedge Fund Clicks$_{t-1}$ (100s)	0.003***	0.002**	0.001	0.004	-0.006	0.010**
	(0.001)	(0.001)	(0.001)	(0.006)	(0.004)	(0.004)
Hedge Fund Clicks$_{t-1}$× I(FC$_t$)	0.008	0.012*	-0.004			
	(0.007)	(0.007)	(0.003)			
Hedge Fund Clicks$_{t-1}$× C&I Rate Spread$_t$				-0.000	0.003**	-0.003**
				(0.002)	(0.002)	(0.001)
Total Clicks$_{t-1}$ (100,000s)	0.009	0.007	0.002	0.007	0.006	0.002
	(0.007)	(0.006)	(0.003)	(0.007)	(0.006)	(0.003)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0058	0.0014	0.0044	0.0058	0.0014	0.0044
Observations	175,122	175,122	175,122	175,122	175,122	175,122
R^2	0.10	0.12	0.10	0.10	0.12	0.10

Table 7: Hedge Fund Interest, Poison Pill Adoption, and Public Activism Campaigns. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if the firm is targeted by an activist hedge fund in a public campaign in quarter t, and 0 otherwise. We define targeted in a public campaign to be the filing of a 13D or the announcement of a proxy fight by an activist hedge fund. The sample includes firm-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. The main independent variable of interest is *Hedge Fund Clicks*, which is equal to the number of views of SEC public filings (clicks) by activist hedge funds in quarter $t-1$ and $t-2$ interacted with the adoption of a poison pill in quarter $t-1$. All variables are defined in Table A.1. Data on poison pill adoptions is hand-collected from firm SEC filings, data on hedge fund clicks is collected via the methodology described in Internet Appendix Section IA.B.1, data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	Activism Target$_t$ (Indicator)							
Poison Pill Type =	All		I(Trigger $\leq$ 10%)	NOL	AIC	Synthetic equity	Anti-Activist	Non-Activist
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Hedge Fund Clicks$_{t-1,t-2}$ (100s)	0.005***	0.005***	0.005***	0.005***	0.005***	0.005***	0.005***	0.005***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Poison Pill Adoption$_{t-1}$	0.011*	0.013**	0.008	0.027	0.006	0.005	0.013	0.013*
	(0.006)	(0.006)	(0.012)	(0.018)	(0.016)	(0.011)	(0.014)	(0.007)
Hedge Fund Clicks$_{t-1,t-2}$× Poison Pill Adoption$_{t-1}$		-0.009***	-0.009***	-0.011**	-0.011**	-0.015***	-0.010***	-0.001
		(0.003)	(0.003)	(0.004)	(0.005)	(0.003)	(0.003)	(0.014)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136
Observations	175,122	175,122	175,122	175,122	175,122	175,122	175,122	175,122
R^2	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Table 8: Hedge Fund Interest, Poison Pill Adoption, and CEO Turnover. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if the CEO of a firm leaves his/her position in quarter t, and 0 otherwise. The sample includes firm-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. The main independent variable of interest is *Hedge Fund Clicks*, which is equal to the number of views of SEC public filings (clicks) by activist hedge funds in quarter $t-1$ and $t-2$ interacted with the adoption of a poison pill in quarter $t-1$. All variables are defined in Table A.1. Data on poison pill adoptions is hand-collected from firm SEC filings, data on hedge fund clicks is collected via the methodology described in Internet Appendix Section IA.B.1, data on CEO turnover is from BoardEx, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	CEO Turnover$_t$ (Indicator)							
Poison Pill Type =	All		I(Trigger $\leq 10\%$)	NOL	AIC	Synthetic equity	Anti-Activist	Non-Activist
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Hedge Fund Clicks$_{t-1,t-2}$ (100s)	0.003**	0.003**	0.003**	0.003**	0.003**	0.003**	0.003**	0.003**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Poison Pill Adoption$_{t-1}$	0.012*	0.013**	-0.003	0.000	0.028	0.009	-0.001	0.012*
	(0.006)	(0.006)	(0.011)	(0.016)	(0.020)	(0.014)	(0.013)	(0.007)
Hedge Fund Clicks$_{t-1,t-2}\times$ Poison Pill Adoption$_{t-1}$		-0.001	-0.006	-0.009**	0.001	0.007	-0.006*	0.030*
		(0.007)	(0.004)	(0.004)	(0.013)	(0.012)	(0.004)	(0.018)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry $\times$ Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0252	0.0252	0.0252	0.0252	0.0252	0.0252	0.0252	0.0252
Observations	175,122	175,122	175,122	175,122	175,122	175,122	175,122	175,122
R^2	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10

Table 9: Poison Pill Adoption, Hedge Fund Interventions, and Corporate Outcomes. This table reports the results of stacked linear regression models (Gormley and Matsa, 2011) in which the dependent variables are various corporate outcomes and policies. The main independent variables are the interaction of a post dummy with an indicator for the adoption of an anti-activist poison pill (a) or an indicator for the firm becoming an activist target (b). Our empirical specification uses a stacked methodology (Gormley and Matsa, 2011) to address issues created by including already "treated" firms in the control group (e.g., see De Chaisemartin and d'Haultfoeuille, 2020; Callaway and Sant'Anna, 2021; Goodman-Bacon, 2021; Sun and Abraham, 2021; Baker et al., 2022). All variables are defined in Table A.1. Data on poison pill adoptions is hand-collected from firm SEC filings, data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	Investment	Sales Growth	Share Repurchases (Ms)	Cash	Leverage	ROA
	(1)	(2)	(3)	(4)	(5)	(6)
Anti-Activist Poison Pill × Post (a)	0.024*	0.007	1.799	0.057***	-0.070**	0.009**
	(0.015)	(0.014)	(6.177)	(0.020)	(0.029)	(0.004)
HF Target × Post (b)	-0.005*	-0.003	18.465**	-0.004	0.006	-0.000
	(0.003)	(0.003)	(8.624)	(0.003)	(0.004)	(0.001)
F-stat (a—b)	3.84*	0.50	2.52	9.38***	7.05***	4.71**
(p-Value)	(0.050)	(0.478)	(0.113)	(0.002)	(0.008)	(0.030)
Controls	No	No	No	No	No	No
Firm × Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Quarter × Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0228	0.0434	29.6246	0.1980	0.2345	0.0005
Observations	3,043,401	2,960,962	3,102,245	3,097,444	3,093,575	3,051,069
R^2	0.67	0.19	0.58	0.90	0.89	0.80

Table 10: Portfolio Returns. Each month, the portfolio includes all firms whose anti-activist pill event falls within the indicated relative-month window. Portfolio excess returns are regressed on the market factor, SMB, HML, and momentum using Newey-West standard errors with 12 lags. A minimum of 3 firms per month is required. Coefficients are reported on the first line and t-statistics are in parentheses on the second line. Alpha is reported in percentage points per month. All variables are defined in Table A.1. Data on poison pill adoptions is hand-collected from firm SEC filings, data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

Panel A: Equal-weight four-factor model

Window	Alpha	Beta	SMB	HML	MOM	N	R2
[-36,-1]	-1.11***	1.12***	0.67***	0.46***	-0.22***	165	77.2%
	(-6.03)	(14.63)	(4.00)	(2.89)	(-4.75)		
[+1,+36]	-0.70**	1.18***	0.64***	0.17	-0.24***	171	77.9%
	(-2.42)	(14.17)	(5.16)	(1.20)	(-4.32)		
[+1,+60]	-0.39	1.15***	0.70***	0.24*	-0.13**	185	78.4%
	(-1.30)	(15.96)	(6.31)	(1.97)	(-2.04)		

Panel B: Value-weight four-factor model

Window	Alpha	Beta	SMB	HML	MOM	N	R2
[-36,-1]	-0.56**	1.29***	0.38**	0.52***	-0.24***	165	77.8%
	(-2.32)	(22.41)	(2.38)	(3.42)	(-3.17)		
[+1,+36]	0.62*	1.25***	0.46**	0.25	-0.12	171	64.4%
	(1.76)	(10.70)	(2.18)	(1.20)	(-1.31)		
[+1,+60]	0.62*	1.06***	0.35*	0.33*	-0.07	185	55.4%
	(1.75)	(12.11)	(1.92)	(1.90)	(-0.69)		

Appendix

Table A1: Variable Definitions

Variable	Definition
Poison Pill	Shareholder rights plan that offers existing shareholders, but not new shareholders crossing the trigger threshold, the right to buy additional shares in the company at deep discounts.
Trigger Threshold	The ownership threshold in poison pills for new shareholders, above which shareholder rights plans are triggered.
NOL (Net Operating Loss) Pill	A poison pill with a trigger threshold of 5% designed to protect a firm's tax assets.
Acting-in-Concert Provision	A poison pill provision that aggregates the shareholdings of multiple parties who act in concert or pursue a common purpose when determining whether the trigger threshold has been exceeded.
Synthetic Equity Provision	A poison pill provision under which derivative securities qualify as beneficial ownership for the purpose of determining whether shareholdings have exceeded the trigger threshold.
Anti-Activist Pill	A poison pill with a trigger threshold of 5%, or a poison pill with a trigger threshold of $\leq 10\%$ *and* one of the following: a synthetic equity provision, an acting-in-concert provision, or both.
Higher Trigger for Institutions	A poison pill with exemptions, such as a higher trigger threshold for certain institutional investors.
Grandfather Provision	A poison pill provision that exempts current shareholders from trigger thresholds.
Duration	The number of years a poison pill remains in place.
Shareholder Vote Required	A poison pill provision that requires a shareholder vote.
Chewable Pill	A poison pill that is not triggered by certain qualified or permitted offers.
Hostile Activist Intervention	A public activism declaration with hostile intentions, as defined by Bebchuk et al. (2015).
Activist Hedge Funds	Hedge funds that have filed at least one 13D or initiated a proxy fight per Bebchuk et al. (2015) and Boyson et al. (2022) and have an IP address identified on ARIN.

Total Clicks	The total number of views (clicks) on SEC filings. The construction of the clicks data is detailed in Section IA.B.1.
HF Clicks	The number of views (clicks) by activist hedge funds on SEC filings. The construction of the clicks data is detailed in Section IA.B.1.
Nonactivist HF Clicks	The number of views (clicks) by non-activist hedge funds on SEC filings. The construction of the non-activist hedge fund list is detailed in Section 3. The construction of the clicks data is detailed in Section IA.B.1.
Closest Competitor	The one, three, or five firms closest to the firm of interest in the TNIC classification (Hoberg and Phillips, 2016).
Closest Competitor Clicks	The number of hedge fund clicks on the firm(s) classified as the top, top three, or top five closest competitors. The construction of the clicks data is detailed in Section IA.B.1.
Public Acquisitions	Total number of acquisitions in quarter t, collected from Thomson Reuters SDC Platinum Database.
C&I Rate Spread	The spread between the average interest rate on commercial and industrial loans and the Federal Funds effective rate during quarter t. Source: `https://www.federalreserve.gov/releases/e2/current/`.
Total Assets (Book value of Assets)	Natural logarithm of book value of assets at the end of quarter t from Compustat. $log(atq)$
Market Leverage	The total market leverage of the firm, as defined by Frank and Goyal (2009), at the end of quarter t, collected from Compustat. $(dlcq + dlttq)/((prccq * cshoq) + dlcq + dlttq + pstkq - txditcq)$
Cash Holdings	Cash and cash equivalents at the end of quarter t, collected from Compustat, scaled by book assets. $cheq/atq$
Capital Expenditures	Capital expenditures at the end of quarter t, collected from Compustat, scaled by net property, plant, and equipment. $capxy/ppenq$
R&D expense	R&D expenditures at the end of quarter t, collected from Compustat, scaled by book assets. $xrdq/atq$
NOL (Net Operating Loss)	Tax loss carry forwards at end the year, collected from Compustat, scaled by book assets. $tlcf/at$
Return on Assets	Operating income at the end of quarter t, collected from Compustat, scaled by book assets. $oiadpq/(teqq + txditcq - pstkq)$
Quarterly Stock Return	Quarterly stock return from CRSP.

Tobin's q	Adjusted book to market ratio at the end of quarter t, collected from Compustat.$((prccq * cshoq) + dlcq + dlttq + pstkq - txditcq)/atq$
Dividend Yield	The dividend yield at the end of quarter t, collected from Compustat. $dvpspq/prccq$
Years Since IPO	Number of years since a firm's IPO, collected from CRSP.
I(Classified Board)	Indicator variable that equals 1 if the firm has a classified board in quarter t, and 0 otherwise. Data collected from Guernsey et al. (2024). https://sites.google.com/utk.edu/matthew-serfling/data?authuser=0
Institutional Ownership	The percentage of shares held by institutional owners during quarter q, collected from Thomson Reuters.
I(CEO-Chair)	Indicator variable equal to 1 if a CEO serves as the chairman of the board, and 0 otherwise, collected from BoardEx.
Board Size	The number of directors on the board, collected from BoardEx.
Pct. Independent Directors	The ratio of independent directors to total number of directors, collected from BoardEx.
I(Advance Notice Bylaw)	Indicator Variable that equals 1 if the firm has an advance notice bylaw in place during quarter t, and 0 otherwise. Collected from FactSet.

Internet Appendix
for
"The Rise of Anti-Activist Poison Pills"

OFER ELDAR[1], TANJA KIRMSE[2] and MICHAEL D. WITTRY[3]

This Internet Appendix reports results that are mentioned but not tabulated in the main paper. In Section IA.A, we discuss the institutional and legal background of anti-activist defensive tactics. Section IA.B explains the details of the data construction for activist hedge fund clicks and holdings. Section IA.C discusses the results of a regression discontinuity (RD) design for pill terminations. Finally, in Section IA.D we report 12 figures and 18 tables, as outlined below:

1. Figure IA.1: The evolution of poison pills' discriminatory provisions and other characteristics
2. Figure IA.2: HF clicks validation (Gantchev et al. threat intensity)
3. Figure IA.3: Clicks of targeting vs. non-targeting hedge funds (permutation test)
4. Figure IA.4: Continuous hedge fund clicks as HF threat intensity (binscatter)
5. Figure IA.5: Clicks surrounding new pill adoptions excluding firms with public activism campaigns
6. Figure IA.6: Public acquisitions and the commercial and industrial loans rate spread
7. Figure IA.7: Size distribution of pill-adopting firms
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9. Figure IA.9: Pill termination proposals and hedge fund activity (RD plots)
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17. Table IA.5: Poison pill adoptions and hedge fund clicks controlling for fund-level unobserved heterogeneity
18. Table IA.6: Poison pill adoption and rolling weighted hedge fund clicks
19. Table IA.7: Poison pill adoption and full sample weighted hedge fund clicks
20. Table IA.8: Hedge fund activism, anti-activist poison pills, and director turnover

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21. Table IA.9: Hedge fund interest, poison pill adoption, and subsample splits
22. Table IA.10: Hedge fund interest and poison pill adoptions – excluding takeover bids and rumors
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26. Table IA.14: Hedge fund interest, poison pill adoption, classified boards, and public activism campaigns
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28. Table IA.16: Poison pills and additional defensive measures
29. Table IA.17: The number of hedge funds and anti-activist pill adoptions
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IA.A Institutional and Legal Background

IA.A.1 Institutional Analysis of Anti-Activist Devices

Poison pills, or shareholder rights plans, are widely regarded as the most effective defensive tactic firms can employ against unsolicited takeover bids (Coates, 2000). Introduced in the 1980s during a wave of hostile takeovers, poison pills allow existing shareholders to purchase additional shares of the firm at a deep discount if any person acquires a pre-specified percentage of the firm's shares, typically 15–20%. This mechanism dilutes the acquirer's ownership stake, making the takeover prohibitively expensive. Pills are particularly effective as an anti-takeover device because corporate boards can adopt them swiftly off the shelf without shareholder approval and have ample time to do so when there is an offer to acquire the company, owing to the early-warning system under the Williams Act. As a result, the only practical way for bidders to defeat a pill is to pursue a proxy fight to appoint a board that would redeem it.

What this means in practice is that whether or not a company has an active poison pill on a "clear day", when the company is not under a takeover threat, is largely immaterial from a practical perspective, because a board can easily adopt a pill at any time if there is an offer to buy the company. As pointed out by Coates (2000), the critical question is whether the board adopts a pill in response to a potential change in control. In fact, because all takeovers operate under the shadow of a possible pill adoption, a bidder would typically negotiate with the board regardless, thereby making pill adoptions in response to takeovers mostly redundant, unless the bidder is capable of running and winning a proxy contest.

The basic justification for poison pills is that they enable management to protect shareholders from offers that do not provide a sufficiently high control premium. The major concern however is that they serve as an entrenchment device for underperforming managers (Gompers et al., 2003). In the 2000s, shareholder groups and proxy advisory firms pressured public corporations to eliminate anti-takeover devices, including poison pills. As a result,

there has been a sharp decline in active pills. However, as (Coates, 2000) argues, the elimination of these pills has had little effect on valuations because, on a "clear-day," pills are inconsequential, and boards have the power to adopt them at any time.

During the same period, however, companies began using poison pills to forestall the influence of hedge fund activism. Hedge fund activists do not seek to gain control of target corporations, but rather acquire a sizable ownership stake and use their voting rights to pressure management to change corporate policies. Importantly, there is no regulatory warning system for hedge fund interventions. Hedge funds must file a Schedule 13D within 10 days after they reach a 5% ownership stake. By the time they report their ownership, which not infrequently exceeds 10%, they have already acquired a stake that places them in a strong position to threaten management and win a possible proxy fight.

As described by Kahan and Rock (2019), pill terms have changed to target activists' stock accumulations. These terms primarily include: (a) lower trigger thresholds of 10 percent ownership or less (as compared to the historically typical 15-20% threshold), (b) acting-in-concert provisions that count the stakes of shareholders coordinating with each other, sharing a common purpose, or, in some cases, even purchasing stock simultaneously for the purpose of computing the trigger threshold, and (c) synthetic equity provisions that treat economic interests under derivative contracts referencing the target company's stock, such as cash-settled swaps, as equity ownership.

Moreover, corporations have started using pills that are ostensibly designed to protect a company's net operating loss ("NOL") assets, but may, in fact, place substantial limits on hedge fund activism (Edelman and Thomas, 2012). NOLs may be used to offset future profits for tax purposes. However, the company's ability to utilize this tax benefit is significantly limited if an ''ownership change," defined as a more-than-50–percentage-point cumulative increase in ownership by one or more 5% shareholders over a rolling three-year period. The rationale for NOL pills is to protect the NOL from a potential acquisition that might undermine the company's ability to use its NOL-related tax asset. Although only a large

ownership change, which typical hedge fund stakes are unlikely to generate, can impair the NOL tax benefit, market practice is for NOL pills to have a 5% trigger because that threshold is referenced in the tax code. Because of their low threshold, NOL pills effectively deter stock acquisitions by activist shareholders seeking to buy sizable stakes that would make activism sufficiently profitable.

Accordingly, a carefully crafted pill may be crucial for limiting the ability of hedge funds to launch a public campaign. In practice, this means that what matters is not whether the company has an active pill in place on a clear day, but whether the board can adopt a pill quickly in anticipation of hedge fund activism, before the activist launches a full campaign.

Finally, it is important to emphasize that other entrenchment devices are unlikely to have a material impact on the ability of hedge funds to launch public campaigns. Two key alternative tactics are classified boards and advance notice bylaws.

A classified board is a structure in which directors are divided into classes, typically serving staggered three-year terms. Staggered boards make it harder to replace a majority of the board in a single election. When combined with a poison pill, they provide strong anti-takeover protection by making it more difficult for a bidder to appoint a board majority that would redeem the pill. However, this defense is likely futile against activist hedge funds, whose goal is to appoint one or a few directors to influence corporate strategy rather than gain outright control. Accordingly, Gow et al. (2024) find that classified boards do not influence hedge funds' ability to gain a board seat at target firms.[4]

Advance notice bylaws are corporate governance provisions that require shareholders to provide notice within a specified timeframe (typically 30-120 days) before an annual meeting if they intend to nominate directors. These bylaws give management time to prepare responses and inform other shareholders about potential proxy contests. However, they are unlikely to significantly hinder activists. These bylaws primarily affect the timing of activist campaigns rather than preventing them altogether, and it is relatively straightforward for

[4]An example is the recent campaign of Engine No. 1, which succeeded in appointing three members to the board of Exxon in the staggered election of four directors in 2021.

activists to comply with the notice periods. Additionally, courts have struck down bylaws that impose onerous requirements on shareholders or interfere with their voting rights.

The Legal Treatment of Anti-Activist Poison Pills

Poison pills, like all anti-takeover devices, may be challenged in court under the *Unocal* test, which requires that (1) there is a threat to corporate policy, and (2) the response is reasonable in relation to the threat posed. Based on this standard, courts rarely question boards' decisions to adopt poison pills to protect shareholders against a change in control without an adequate control premium, so long as it is possible for bidders to run a proxy contest to replace the board[5].

Although the primary legal justification for poison pills is to prevent a change in control, courts have largely upheld pills directed against activist hedge funds, typically on the basis that there is some risk of "creeping control," rather than merely a risk that activists will use their voting power in a proxy contest or pressure management to change the business strategy. On this basis, courts have held valid pills with a 10% trigger threshold, even though there was arguably no realistic chance of a takeover.[6] Thus, courts have legitimized pills with low trigger thresholds directed against activists as a device to protect shareholders from the risk of creeping control.

It is important to emphasize that Delaware courts held in *In re Williams Companies Stockholder Litigation*,[7] that adopting a pill to address a general threat of influence by activist hedge funds on corporate management was impermissible. This is because voting and campaigning are viewed as fundamental shareholder rights, and the risk that shareholders might mistakenly vote the wrong way does not constitute a valid concern. The pill in this

[5]See Unitrin, Inc. v. American General Corp., 651 A.2d 1361 (Del. 1995); Air Products and Chemicals, Inc. v. Airgas, Inc., 16 A.3d 48 (Del. Ch. 2011)

[6]See *Third Point LLC v. Ruprecht* (Del. Ch. 2014), where Sotheby's adopted a poison pill with a 10% trigger following 13D filings by two hedge funds, Marcato and Third Point. See also *Yucaipa American Alliance Fund II, L.P. v. Riggio* (Del. Ch. 2010), where the court upheld a pill with a 20% trigger adopted by Barnes & Noble in response to the acquisition of 17.8% of the company's stock by an activist.

[7]Del. Ch. 2021.

case was also deemed unreasonable because its trigger threshold of 5% combined with an expansive acting-in-concert provision that covered parallel conduct by multiple acquirers, was unreasonable.

While the *Williams* decision limits the ability of boards to adopt pills *explicitly* targeted against activists, it does not appear to significantly affect their ability to adopt 10% pills. In fact, firms virtually never explicitly state that a pill is adopted to ward off an activist, even when the pill includes features that target activists. Instead, they state that the purpose is to reduce the likelihood that any person will gain control of the corporation without paying a control premium. This is true even when, ex post, the pill is viewed as an anti-activist device. [8]

Importantly, even after the *Williams* decision, corporations with net operating losses can adopt NOL pills that have a 5% trigger. These pills were generally held to be valid on the basis that preserving NOLs is a legitimate corporate purpose and the 5% trigger is reasonable.[9] Thus, as some law firms have indicated, corporations with net operating losses can simply adopt an NOL pill to curb activist hedge funds under the pretense of protecting tax assets (Gottfried and Donahue, 2018).[10]

Finally, while Institutional Shareholder Services (ISS) and other proxy advisory firms have pressured corporations to terminate poison pills, their guidelines are generally lenient towards pills that have a short duration of one year or less or those that are subject to shareholder ratification. Moreover, their guidelines largely condone NOL pills with a duration of three years or less, leaving them mostly free of any scrutiny. Given that hedge fund threats tend to be relatively short-lived, and pills can always be re-adopted, ISS places relatively few limitations on anti-activist pills.

[8] See, for example, the press release issued by the Williams Companies when it adopted a pill: www.sec.gov/Archives/edgar/data/107263/000119312520080810/d878306dex991.htm.

[9] *Versata Enterprises, Inc. v. Selectica, Inc.* (Del. 2010).

[10] Heitzman and Lester (2021) find that most firms have nonzero NOL carryforwards, including 90% of "large firms" from 2010-2015.

IA.B Construction of Data

IA.B.1 Hedge Fund Activist Clicks

Data on hedge fund clicks are compiled from several sources following the methodology outlined in Kirmse (2024). First, to obtain click data on SEC documents, we download the full history of log files from the SEC EDGAR log file website.[11] These log files cover the period from January 2003 through June 2017, with some inconsistencies in coverage during the first three years. We then clean the log files following the procedure recommended by Ryans (2017). First, we keep only observations in which website views were successfully delivered (code = 200), the IP address was not automatically identified as a crawler (crawler = 0), and the opened link did not lead to an index page (idx = 0). From this dataset, we drop "robots," which we identify as IP addresses that have any of the following characteristics: 500 or more views per day, 25 or more views per minute, or 4 or more views of *different* firms' filings per minute.

To implement this, we first drop IP addresses with either 500 or more views per calendar day or with 25 or more views per minute. The latter is calculated on a rolling basis (by second), but only within a calendar day. For example, an IP address with 20 clicks between 11:59:30pm and 11:59:59pm on 1/1/2015 and 5 clicks between 12:00:01am and 12:00:15am on 1/2/2015 would not be flagged. After dropping these IP addresses, we also drop those that accessed four or more unique CIKs within one minute. As before, this is calculated on a rolling 60-second basis within a calendar day. For all three criteria, we exclude only the IP address's activity for the days when it is classified as a robot (Gibbons et al., 2021). Finally, we unmask the last three digits of the IP address using the cipher table from Chen et al. (2020).[12]

To merge IP addresses from the EDGAR log file downloads with hedge funds, we start

[11] For example, see https://www.sec.gov/dera/data/edgar-log-file-data-set.html.

[12] There are other similar methods for unmasking the IP addresses. For example, see Gibbons et al. (2021).

by downloading Bulk WhoIs data from the American Registry of Internet Numbers (ARIN). These data include information on all registered IP addresses and contain details of the registrant such as the registered name and address at the time of the download. Next, we compile a comprehensive list of 980 unique activist hedge funds by combining hedge funds identified in two seminal works in the activism literature: Brav et al. (2008) (and their updated work in Bebchuk et al., 2015) and Boyson et al. (2022). These hedge funds consist of all 13D filers from 1994 to 2018 identified as hedge funds in Item 2 of their Schedule 13D or on their Form ADV filings. When the classification is uncertain, publicly available information was used (Boyson et al., 2022).

Finally, we search all ARIN registrants for approximate name matches with the hedge funds in our initial sample and manually compare the IP registration information with the names and addresses that hedge funds list on their SEC filings. As described in Kirmse (2024), we download ARIN WhoIs data and keep all registrants whose name matches the hedge fund name exactly, excluding additions such as "Capital", "Investment", or "Management." For numbers and abbreviations such as 3V and D.E. Shaw, we also search for alternative spellings ("Three V", "DE Shaw"). Then, we use a three-step procedure to retain the most likely matches.

First, we keep all perfect matches, where both the name and the SEC address match. Second, we retain cases where either the name or the SEC address matches a previously identified perfect match. For example, if we find 3V Investment with the correct address, we would also keep "3V Capital", as long as it has the same address. Third, when both the name and address do not match perfectly, but are closely related, we use Google searches to verify the entities. For example, if we find both "Alpine Investments" and "Alpine Management", we search for both firms online and compare their websites and addresses. If they are determined to be separate entities, we do not associate the potential IP address with the hedge fund.

Despite taking significant precautions, it is possible that some IP addresses are misattributed to hedge funds when they actually belong to other firms. However, we do not

expect this noise to bias our results, as information acquisition by non-hedge funds should not systematically influence poison pill adoptions, or be related to 13D filings beyond the non-hedge fund clicks already captured in our control variable. This procedure ultimately yields 431 individual hedge funds for which we can identify at least one IP address block.

Using this novel hedge fund CIK to hedge fund IP address mapping, we are able to compute the number of SEC EDGAR filing views by hedge funds at the firm-quarter level during our sample period.

IA.B.2 Hedge Fund Activist Holdings

We start by appending activism data shared by Bebchuk et al. (2015) and Boyson et al. (2022), and deleting duplicate campaigns. There are four types of campaigns for which we obtain data.

First, we manually collect holdings for campaigns that begin before the 13D filing: The "Date of First Action" occurs before the 13D, for example in the form of a letter.[13] We hand-collect data for these 413 events from Factiva. We keep the Factiva value if there is a campaign by the same hedge fund in the same firm with a start date within 2 quarters of the start date in our activism data. If multiple campaigns fulfill this criterion, we select the campaign with the closest start date to our sample's start date value.

Second, we manually collect holdings for campaigns that were labeled as "Proxy Fights" or "Factiva" in Bebchuk et al. (2015) and where the first step did not already yield results. There are 43 such observations. As before, we keep the Factiva value if there is a campaign by the same hedge fund in the same firm with a start date within 2 quarters of the start date in our activism data. If multiple campaigns fulfill this criterion, we select the campaign with the closest start date to our sample's start date value.

Third, for all remaining observations so far, we scrape holdings data from 13D filings.

[13] We take a conservative approach to assessing hedge fund holdings in 13D filings by collecting data on holdings from the initial 13Ds, rather than subsequent 13D filings that reflect changes in hedge funds' stakes over time. The reason is that funds usually increase their stakes over time. As a result, our measure of hedge fund holdings at the time of the initial 13D filing is likely to be downwardly biased.

We next merge this data with our sample, as well as with Compustat to obtain CIKs. Using these CIKs, we merge the dataset with a list of all SEC EDGAR 13D filings by matching the date and CIK of the filing. This process yields 2,906 observations.

Using this list of 13D filing URLs, we scrape hedge fund holdings. Although the required information in each filing is standardized, the HTML tags used are not consistent across all filings. Therefore, we begin by scraping all information from Line 13 ("PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)"). Hedge funds commonly disclose holdings for multiple associated funds. For example, in its August 23rd 2010 filing for Hot Topic,[14] Becker Drapkin lists seven ownership percentages, ranging from 0.2% to 5.1%. Usually, this occurs when one fund serves as a general partner of another fund or has voting authority over another fund's shares. Therefore, we take the maximum of all disclosed percentages.

Item 5 of Schedule 13D additionally details "Interest in Securities of the Issuer." We scrape this item by extracting all text between "Interest in Securities of the Issuer" and "Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer" (Item 6), then retaining only numbers containing percentage signs from the extracted text. Again, filers may list holdings of multiple funds or discuss group arrangements. For example, in its August 23 2010 filing for Hot Topic, Becker Drapkin lists the reporting persons as the beneficial owner of 5.083%, with individual funds owning 1.574%, 0.195%, and 1.688%, respectively. Importantly, the filer also discloses the total amount of 9.042% held by "the group", which we use as the percentage holdings value for this 13D, since it captures all ownership. Thus, as above, we retain the maximum percentage amount disclosed in Item 5.

Finally, we supplement the scraping with manual hand-collection of ownership data in two circumstances. First, when ownership for any filing fails to be scraped successfully. Second, in some cases, Item 5 discloses cross-holdings among funds, debt instruments, or

[14] E.g., see https://www.sec.gov/Archives/edgar/data/1017712/000135982410000037/schedule13d.htm.

other idiosyncratic provisions. For example, in its August 25 2011 Schedule 13D filing for Twin Disk,[15] Gamco Investors states in Item 5: "Gabelli Funds has sole dispositive and voting power with respect to the shares of the Issuer held by the Funds so long as the aggregate voting interest of all joint filers does not exceed 25% of their total voting interest in the Issuer." Here, 25% is the percentage found in Item 5, but it is not the correct holding figure. To avoid using the wrong ownership percentage due to such cases, we merge data from Line 13 with Item 5 and keep observations where the maximum percentage in Line 13 matches the maximum percentage disclosed in Item 5, provided that this percentage is greater than 5% and less than 50%. All observations with a mismatch, or suspiciously high or low ownership values, are then hand-checked.

In the manual hand-collection process, we first examine Item 5 and use the largest percentage associated with phrases such as "we collectively own," "ownership in aggregate," or "the group collectively owns." We include in the holdings calculation any shares subject to the exercise of options. We then decide whether to retain the largest value from Item 5 or Line 13 based on the following logic. When no "aggregate" ownership is mentioned, we use the largest percentage disclosed across Line 13 and Item 5. However, Line 13 must be lower than 50%, and within 0.1 percentage points of the sum of percentages disclosed in Item 5.[16] We allow for minor discrepancies due to rounding. Some 13D filings report ownership percentages in Item 2, instead of Item 5, or in a letter to the board, which is often included as an appendix to the filing. These ownership percentages are used when the maximum percentage reported in Item 5 and the maximum percentage reported in Line 13 are inconsistent, and the maximum of (Item 5, Line 13) is either less than 5% or exceeds 50%.

When the same percentage appears with inconsistent decimals within the same filing (e.g. 7.88% in Item 5, but 7.9% in Line 13),[17] we retain the more precise value.

[15] E.g., see https://www.sec.gov//Archives//edgar/data/100378/0000807249-11-000280.txt.

[16] For example, we use 7.5% for https://www.sec.gov/Archives/edgar/data/1037976/000089534517000195/wd13d-lasalle_generation.htm

[17] E.g., see https://www.sec.gov//Archives//edgar/data/854460/0000950149-04-001359.txt.

Table IA.B.1: Hedge Funds' Holdings by firm size. This table reports hedge funds' initial stakes in targets conditional on a public activism announcement, split by target size. Column 1 ("T1") shows average holdings for the smallest tercile of firms. Columns 2 and 3 ("T2" and "T3") show average percentage holdings for the middle and largest tercile of firms, respectively. Dec10 is the largest decile (the top 10%) of firms. Firms sizes are measured by market cap (top row) and total assets (bottom row) as of the end of the year. Columns 5 through 8 compare the means in a t-test across groups. The smallest tercile of firms has an average market cap of $40 million, and median of $38 million. The middle tercile of firms has an average market cap of $205 million, and median of $187 million. The largest tercile of firms has an average market cap of $3.2 billion and median of $1.4 billion. The largest decile of firms has an average market cap of $8.3 billion, and a median market cap of $5.0 billion. The smallest firm in the top decile of firms has a market capitalization of $2.5 billion. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	Average Holdings (%)				Differences in Means			
	T1	T2	T3	Dec10	T1–T2	T1–T3	T2–T3	T1–Dec10
Full Sample								
Holdings by Mkt Cap.	10.725	9.337	9.000	8.589	1.388***	1.725***	0.337	2.136***
N	1,778	1,764	1,770	530	3,542	3,548	3,534	2,308
Holdings by Book Assets	10.789	9.557	8.668	8.473	1.232***	2.121***	0.889***	2.316***
N	1,850	1,844	1,845	552	3,694	3,695	3,689	2,402
2003–2007								
Holdings by Mkt Cap.	10.160	9.054	8.308	7.880	1.106**	1.851***	0.746**	2.280***
N	714	714	713	214	1,428	1,427	1,427	928
Holdings by Book Assets	10.311	9.014	8.110	7.843	1.297***	2.201***	0.904***	2.467***
N	749	740	739	222	1,489	1,488	1,479	971
2008–2012								
Holdings by Mkt Cap.	11.859	9.687	8.978	8.108	2.172***	2.881***	0.709	3.751***
N	560	558	559	162	1,118	1,119	1,117	722
Holdings by Book Assets	11.956	9.451	9.168	8.584	2.505***	2.789***	0.283	3.372***
N	584	584	582	174	1,168	1,166	1,166	758
2013–2017								
Holdings by Mkt Cap.	10.475	9.564	9.605	8.070	0.911*	0.871	−0.041	2.405***
N	498	498	498	148	996	996	996	646
Holdings by Book Assets	10.504	9.640	9.328	8.421	0.864	1.176**	0.313	2.083***
N	522	562	477	156	1,084	999	1,039	678

Table IA.B.2: Size Cutoffs for Holdings. This table reports firm sizes of each tercile and the largest decile, used to calculate holdings by firm size above.

	Tercile 1		Tercile 2		Tercile 3		Decile 10		
	Mean	P50	Mean	P50	Mean	P50	Mean	P50	Min
2003–2007									
Mkt Cap. ($M)	41.58	39.94	195.70	173.26	2,453.13	850.34	6,431.45	3,031.70	1,627.73
N	714		714		713		214		
Book Assets ($M)	52.97	45.24	296.93	280.65	3,781.65	1,505.44	9,745.06	3,863.40	2,496.40
N	749		740		739		222		
2008–2012									
Mkt Cap. ($M)	27.79	26.50	143.89	135.48	2,460.20	1,052.12	6,510.78	4,902.69	2,076.67
N	560		558		559		162		
Book Assets ($M)	56.34	51.65	351.06	315.53	8,160.52	2,172.92	23,157.24	8,958.59	4,111.10
N	584		584		582		174		
2013–2017									
Mkt Cap. ($M)	63.58	57.93	325.45	280.65	4,991.88	2,214.60	12,462.67	8,278.78	4,096.38
N	498		498		498		148		
Book Assets ($M)	78.31	68.73	613.39	461.66	28,733.52	3,488.70	82,177.95	10,726.95	6,327.60
N	522		562		477		156		

IA.C Regression Discontinuity Results for Pill Terminations

The adoption results in the main paper indicate that poison pills, especially those with anti-activist provisions, are associated with a reduced likelihood of public campaigns. In this section, we examine whether terminating an active pill has the opposite effect, increasing a firm's exposure to hedge fund activism. To do so, we analyze shareholder proposals to remove poison pills, which provide a quasi-experimental setting for assessing the consequences of pill termination.

Specifically, we employ a regression discontinuity (RD) design to estimate the causal effect of poison pill termination on subsequent hedge fund activity. Following Cuñat et al. (2012); Ertimur et al. (2013), we exploit the fact that shareholder proposals pass only if they receive at least 50% of the vote share, measured as the percentage of votes "for" out of total votes cast. This approach relies on research showing that although shareholder proposals are not binding, they significantly affect firm policies (Ferri, 2012). By comparing proposals that narrowly pass with those that narrowly fail, we isolate the effect of pill termination from other firm characteristics that vary smoothly with vote share, such as size, performance, ownership, or governance structures, that could also influence hedge fund attention and targeting.

We collect all shareholder proposals relating to the termination of active poison pills from FactSet over our sample period of 2003 through 2017. After merging with our main sample, we are left with 110 termination proposals. Panel A of Figure IA.8 depicts the distribution of vote shares for these proposals. Though there is some bunching just below the 50% threshold, the McCrary test (Panel B) fails to formally reject the null hypothesis of no discontinuity in the density of the running variable (vote share).

Figure IA.9 displays the RD plots for two key outcomes, subsequent hedge fund clicks and hedge fund targets (public campaigns) in the four quarters after the shareholder meeting. To address concerns about ad hoc choices of bin spacing and polynomial order, we follow

the methods established in Calonico et al. (2015). Thus, both panels in Figure IA.9 apply Calonico et al.'s (2015) optimal data-driven methodology using Stata's "rdrobust" command off-the-shelf. Both Panel A for hedge fund clicks and Panel B for hedge fund targets reveal sharp, statistically significant discontinuities at the cutoff (50% vote share), consistent with a causal increase in hedge fund activity following pill termination.

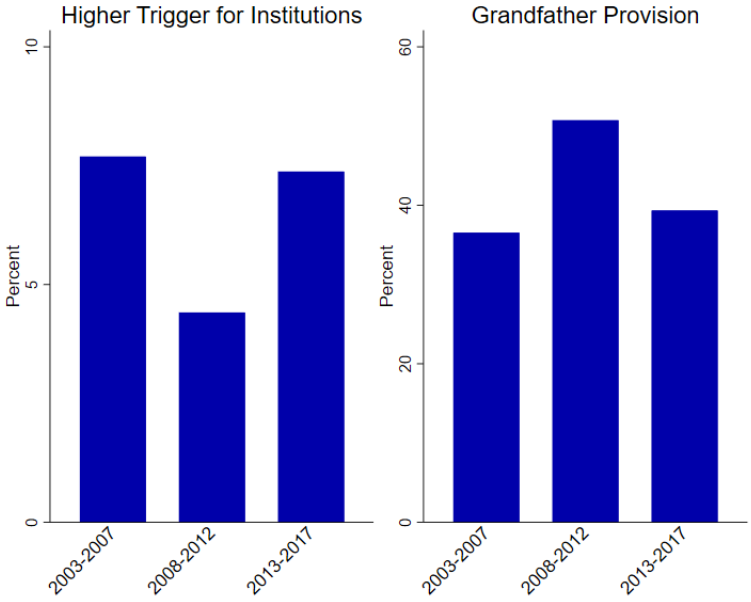
Additional placebo evidence in the Internet Appendix supports the interpretation that the post-vote increase in hedge fund activity is driven by pill removal, rather than by differences between firms with proposals that narrowly pass versus narrowly fail. First, Figure IA.10 shows no discontinuity in hedge fund clicks or targets in the four quarters preceding the pill-termination vote. Second, Figures IA.11 and IA.12 report placebo tests using other governance proposals. If anything, hedge fund activity appears to decline after the successful passage of a declassification proposal or a general governance proposal, respectively. Taken together, these placebo tests indicate that the post-vote increase in hedge fund activity is not simply a general response to governance-related proposals, such as increased attention due to the presence of dissatisfied institutions, but is specific to terminating a poison pill.

Accordingly, the RD evidence reinforces the patterns documented in Section 6.1. The adoption analysis shows that firms are less likely to face activism after implementing a pill, and the RD results demonstrate that removing an active pill materially increases a firm's exposure to activist intervention.

IA.D Additional Figures and Tables

Figure IA.1: The Evolution of Poison Pills. This figure depicts the evolution in the characteristics and provisions of newly adopted pills through time. Panel A depicts the prevalence of discriminatory provisions, and Panel B depicts the prevalence of other common features of poison pills such as the duration, whether the pill requires shareholder approval, and whether it is chewable. Data on poison pill characteristics and provisions is hand-collected from firm SEC filings as described in Section 2. The number of new pill adoptions in the periods of 2003–2007, 2008–2012, and 2013–2017, are 195, 252, and 124, respectively. All variables are defined in Appendix Table A.1 in the main paper.

(A) Discriminatory Provisions through Time.



(B) Other Characteristics through Time.

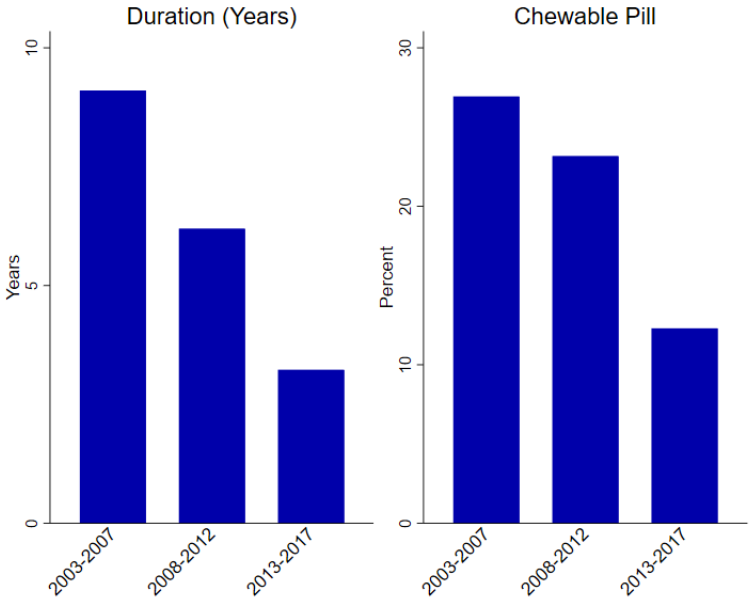


Figure IA.2: HF Clicks Validation. This figure depicts a Binscatter plot with values of threat intensity (Gantchev et al., 2019) on the x-axis and hedge fund clicks on the y-axis. Threat intensity is measured as the number public activism campaigns (13Ds or proxy fights) in a Fama-French 48 industry in quarter t, divided by the total number of unique firms in the same industry-quarter. See Gantchev et al. (2019) for more information. Data on hedge fund clicks is collected via the methodology described in Internet Appendix Section IA.B.1, and data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang.

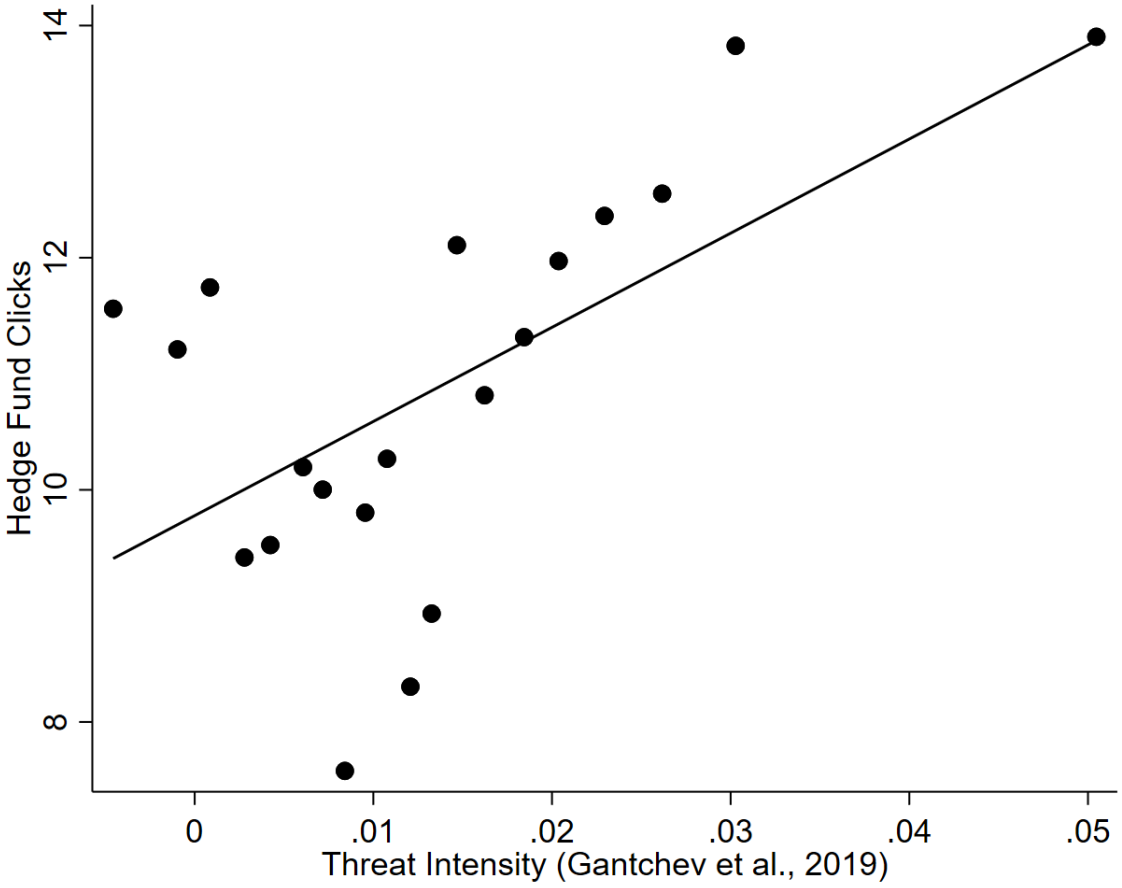


Figure IA.3: Clicks of Targeting vs. Non-Targeting Hedge Funds. This figure depicts the distribution of coefficients from regressions using randomly assigned hedge fund clicks that do not correspond to the fund that later files an activist campaign. In particular, for each actual hedge fund j that targets firm i in quarter t, we randomly assign the clicks on firm i from hedge fund $k \neq j$ in quarter t. We then regress an indicator variable equal to 1 if hedge fund j publicly targets firm i with a 13D in quarter t on these randomly assigned hedge fund clicks. We include the same fixed effects as in Column (4) of Table IA.1: Firm by Fund FE, Firm by Year-Quarter FE, and Fund by Year-Quarter FE. The black vertical line indicates the estimated coefficient for the focal hedge fund's clicks (e.g., hedge fund j clicking on firm i at quarter t) in Column (4) of Table IA.1. Data on poison pills is hand-collected from firm SEC filings as described in Section 2, data on hedge fund clicks is collected via the methodology described in Internet Appendix Section IA.B.1, and data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang. All variables are defined in Appendix Table A.1.

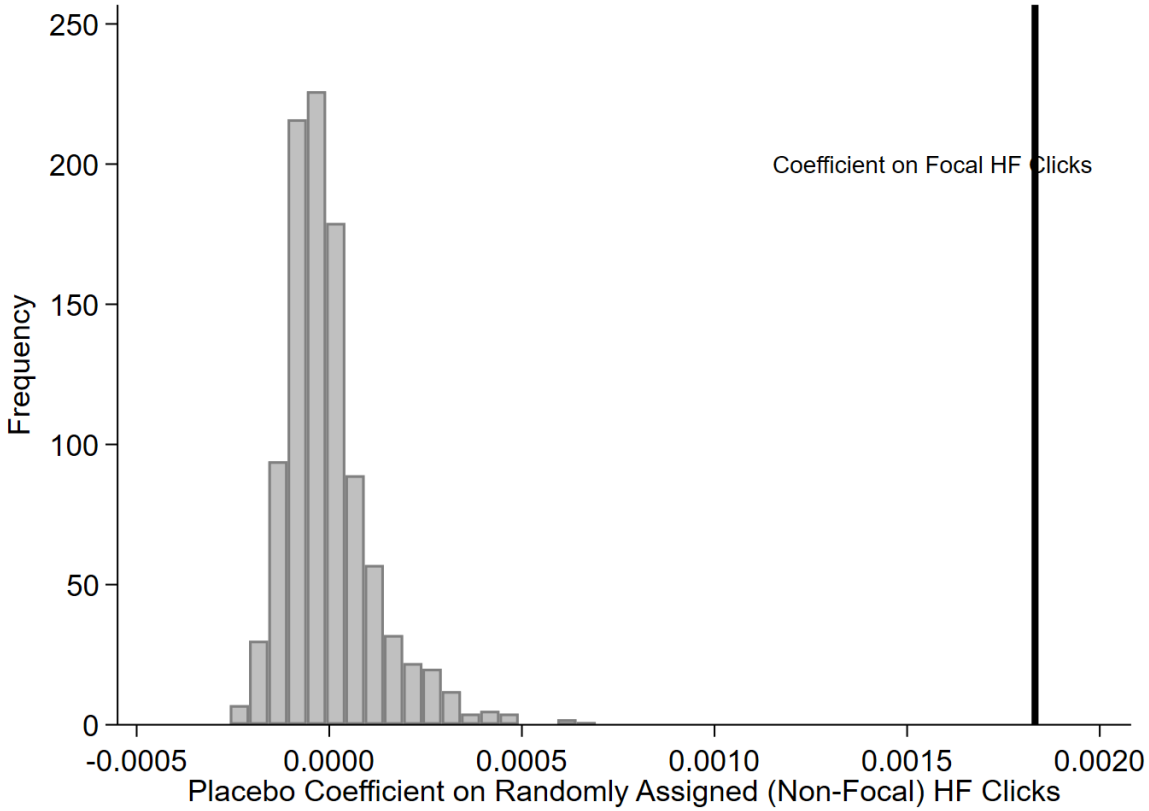
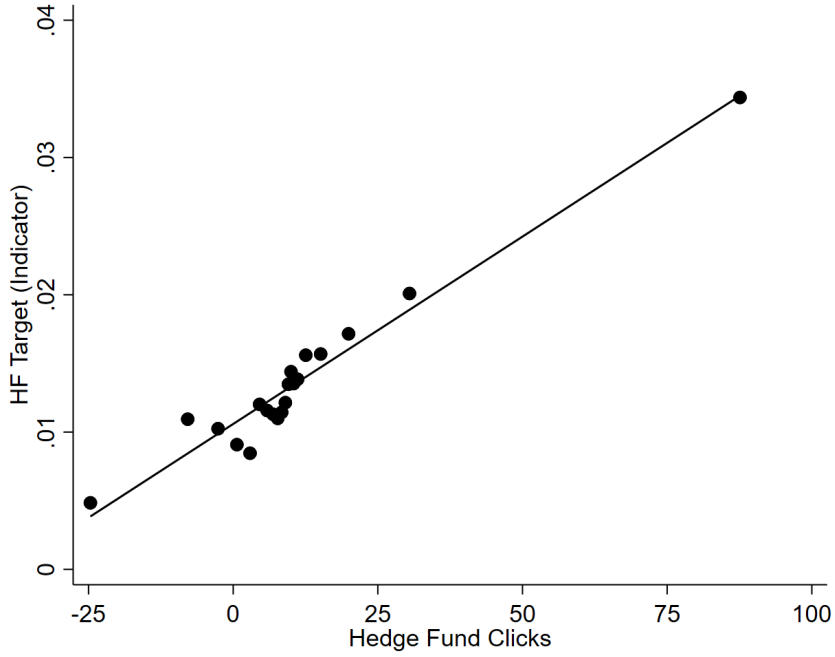
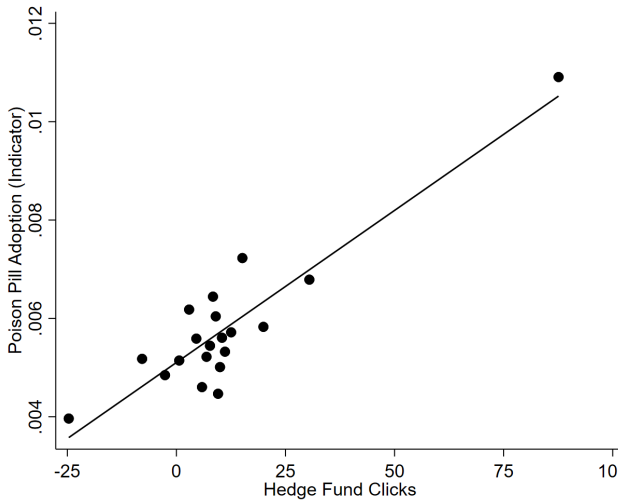


Figure IA.4: Continuous Hedge Fund Clicks as HF Threat Intensity. These figures depict the relationship between hedge fund clicks and firm outcomes (public activism campaigns and poison pills adoptions) in binscatter plots using optimally selected bin sizes. Panel A shows hedge fund target probability, panel B shows the probability of poison pill adoption, and Panel C shows the probability of anti-activist poison pill adoption. Data on poison pills is hand-collected from firm SEC filings as described in Section 2 and data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang. All variables are defined in Appendix Table A.1.

(A) HF Targets.



(B) All Poison Pill Adoptions.



(C) Anti-Activist Poison Pill Adoptions.

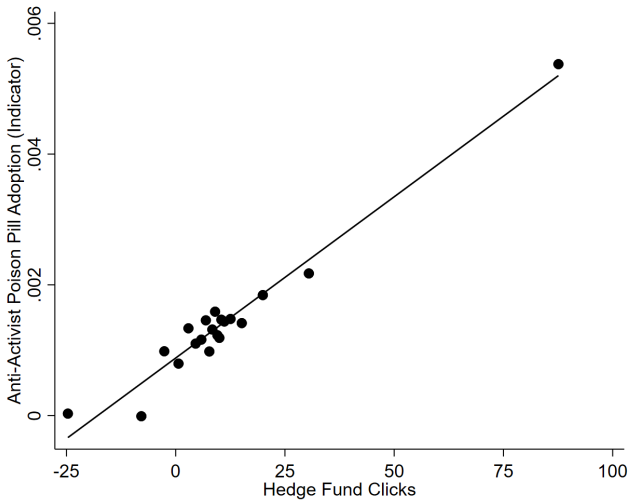


Figure IA.5: Clicks Surrounding New Pill Adoptions Excluding Firms with Public Activism Campaigns. This figure depicts the average number of hedge fund clicks for firms that adopt new poison pills, excluding firms that experience a public activism campaign in the two year period surrounding the poison pill adoption. The x-axis represents event time, where t=0 represents the quarter the firm adopts the pill. The quarters are based on buckets of 90 days such that t=0 includes days 0 through 90, where the pill is adopted on day 0. In this way, all hedge fund clicks at quarter t=0 represent views on or after the day of adoption, but not before it. The red dots depict activist HF clicks, whereas the blue squares depict nonactivist HF clicks. Data on poison pills is hand-collected from firm SEC filings as described in Section 2, data on hedge fund clicks is collected via the methodology described in Internet Appendix Section IA.B.1, and data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang. All variables are defined in Appendix Table A.1.

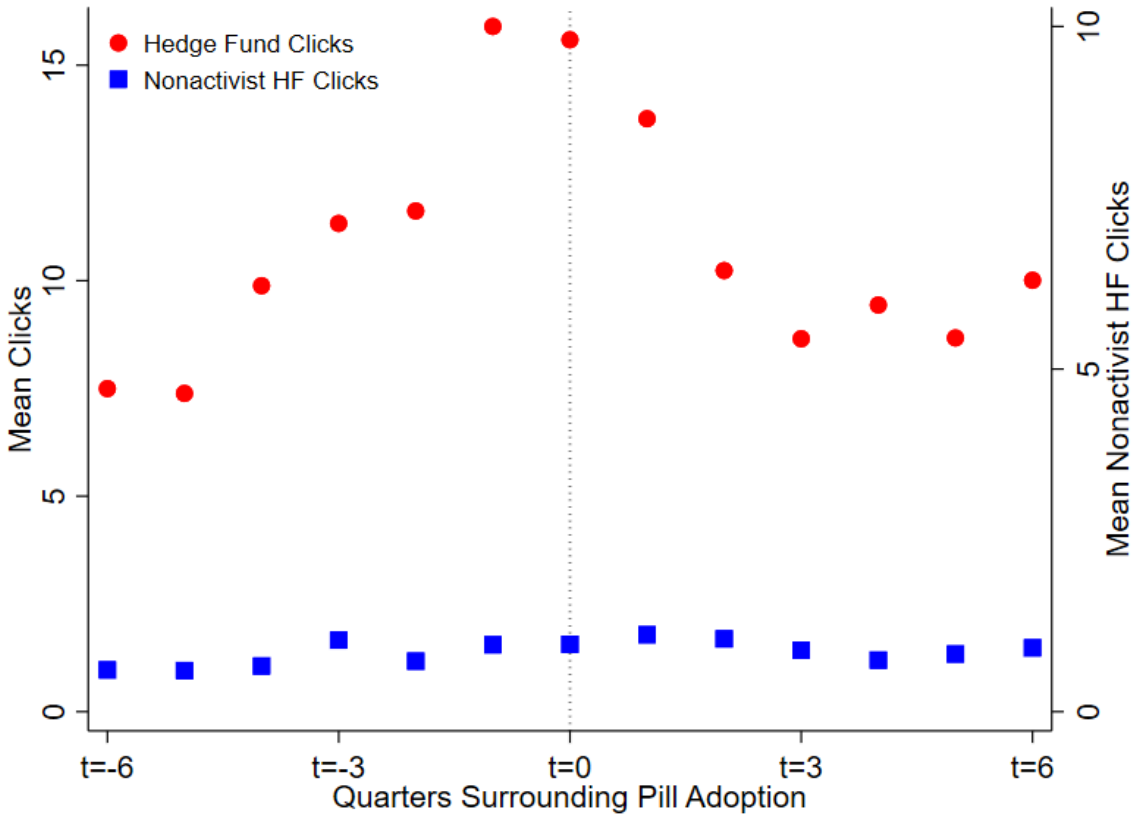


Figure IA.6: Public Acquisitions and the Commercial and Industrial Loans Rate Spread. This figure depicts the trends in the number of acquisitions of public firms and the spread between the average interest rate on commercial and industrial loans and the Federal Funds rate through time. The gray bars depict NBER recessions. Data on public acquisitions is from Thomson Reuters, data on the C&I rate spread is from the Federal Reserve Board Survey of Terms of Business Lending, and NBER recessions is from the St. Louis Federal Reserve Bank.

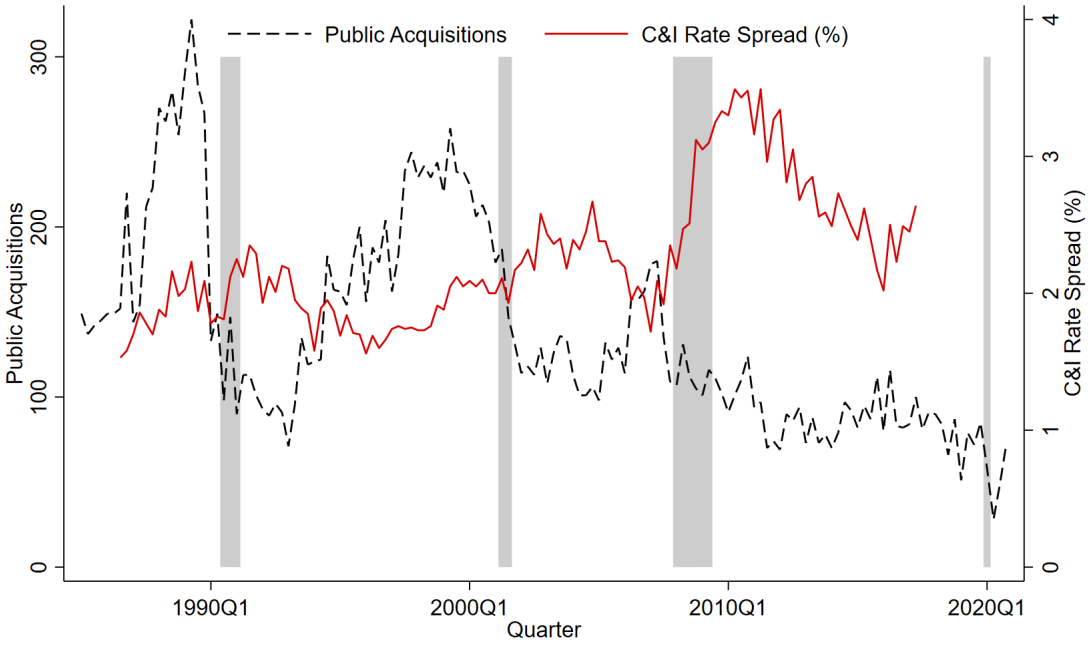
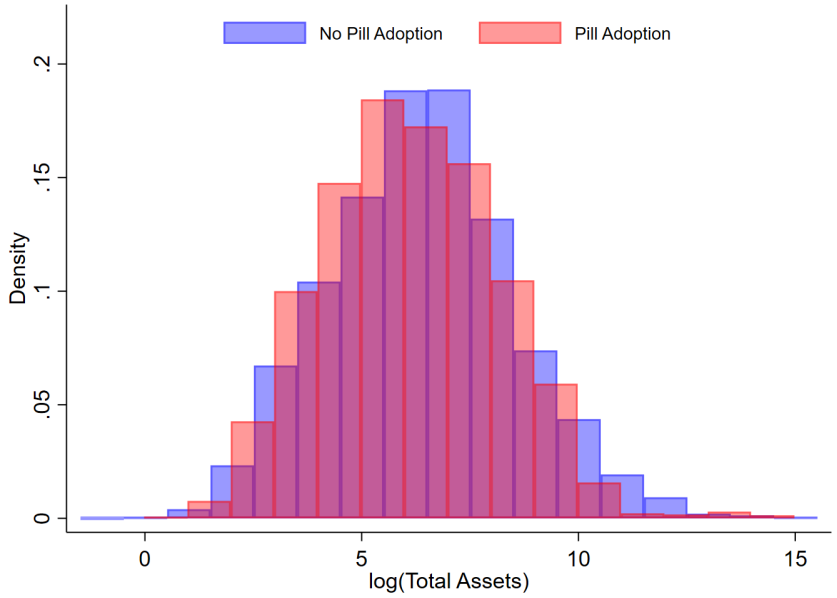
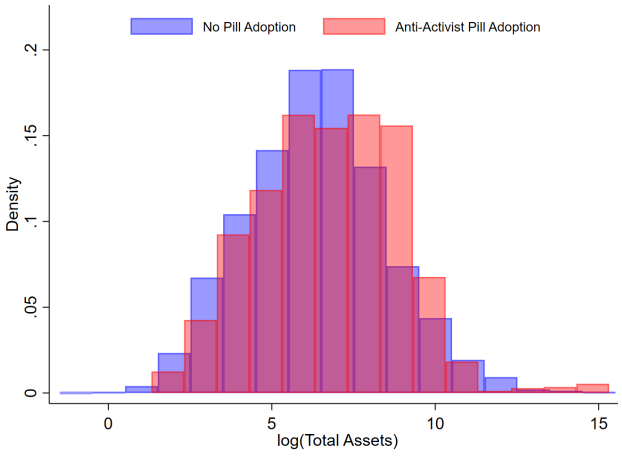


Figure IA.7: Size Distribution of Pill Adopting Firms. These figures depict the distribution of firm size (log of total book assets) for firms that adopt a poison pill over the course of our sample (red bars) against firms that do not adopt a poison pill over the course of our sample (blue bars). Panel A depicts the distributions for all pill adoptions, while Panel B depicts the distributions for anti-activist pill adoptions, and Panel C depicts the distribution for non-activist pill adoptions. Data on poison pills is hand-collected from firm SEC filings as described in Section 2 and data on firm size is from Compustat. All variables are defined in Appendix Table A.1.

(A) All Poison Pill Adoptions.



(B) Anti-Activist Poison Pill Adoptions.



(C) Non-Activist Poison Pill Adoptions.

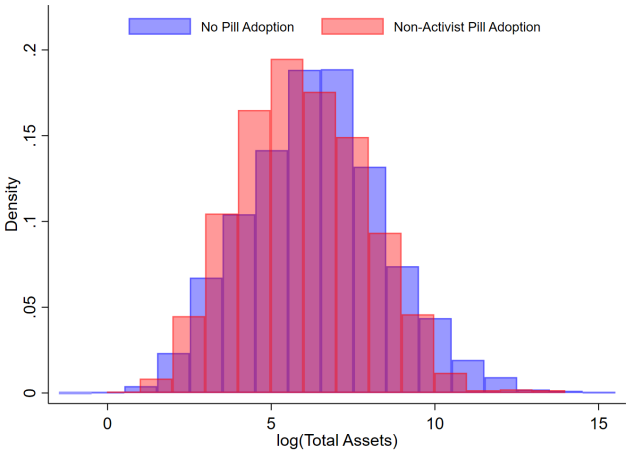
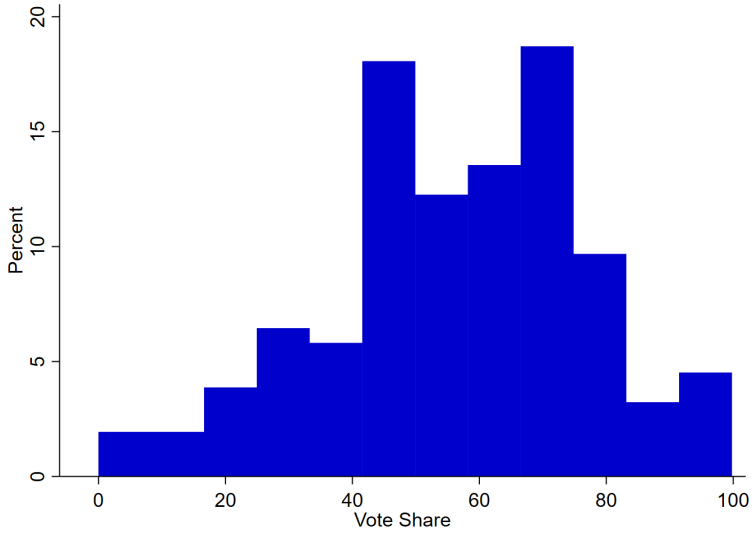


Figure IA.8: Distribution of Vote Share. This figure depicts the distribution of vote share, defined as the percentage of votes "for" of votes cast, for shareholder proposals to terminate active poison pills. Panel A depicts the raw histogram, while Panel B depicts the binned scatter plot with confidence intervals. Data on shareholder proposals is from FactSet.

(A) Vote Share Histogram.



(B) McCrary Test.

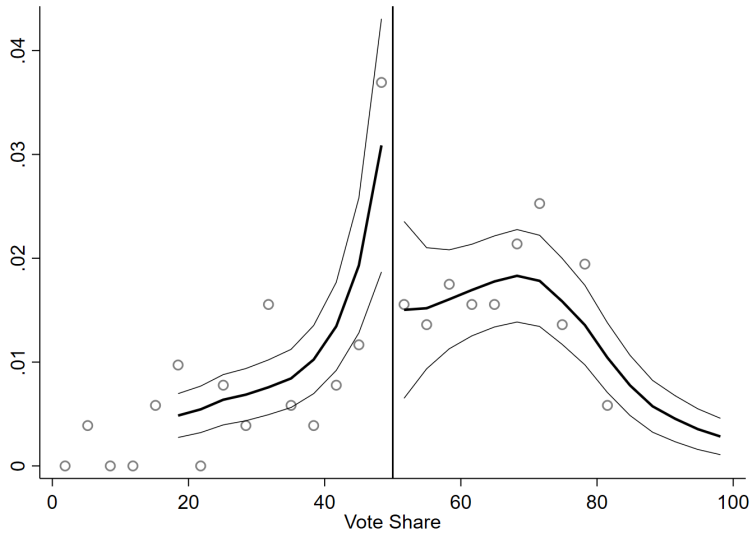
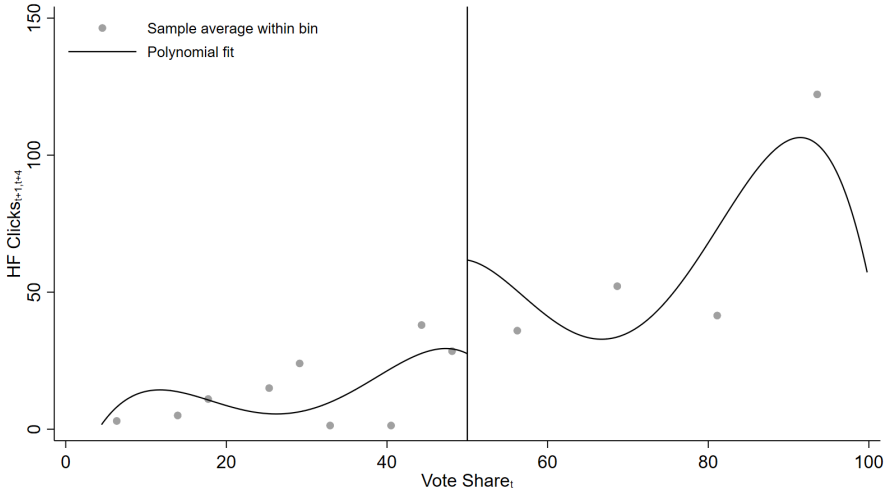


Figure IA.9: Pill Termination Proposals and Hedge Fund Activity. This figure depicts the results of linear regression discontinuity models in which the dependent variable is either hedge fund clicks (Panel A) or an indicator that takes the value of 1 if the firm is targeted by an activist hedge fund in a public campaign (Panel B) in the four quarters following a meeting in which shareholders vote on a proposal to terminate an active poison pill. Following Cuñat et al. (2012) and Ertimur et al. (2013), we focus on the discontinuity created by close votes—those around the 50% majority threshold for such a proposal to pass. The running variable is the *Vote Share*, which is defined as the percentage of "for" votes of the total votes cast. To address concerns about ad hoc choices of bin spacing and polynomial order, we follow the optimal data-driven methods established in Calonico et al. (2015) and use Stata's "rdrobust" off-the-shelf. We define targeted in a public campaign to be the filing of a 13D or the announcement of a proxy fight by an activist hedge fund. The sample includes all shareholder proposals to terminate an active poison pill over the period of 2003Q2 through 2017Q3, which corresponds to our main sample. Data on shareholder proposals to terminate poison pills is from FactSet, data on hedge fund clicks is collected via the methodology described in Internet Appendix Section IA.B.1, and data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang.

(A) HF Clicks.



(B) HF Targets.

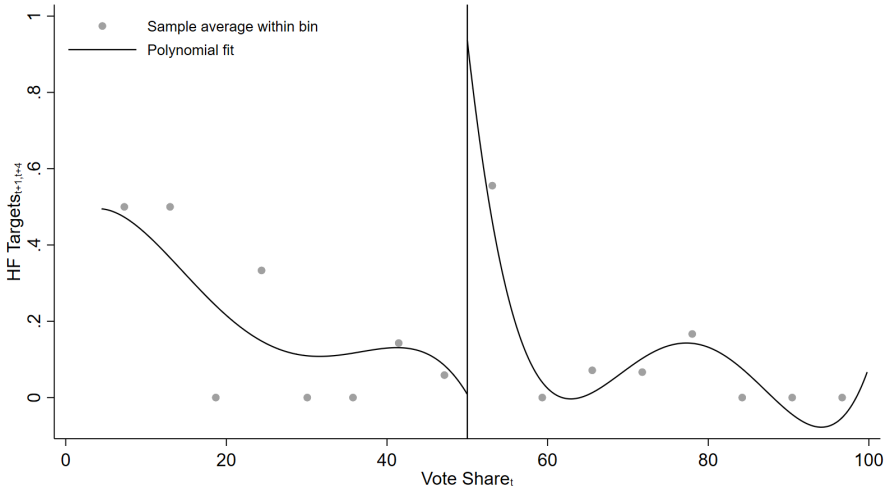
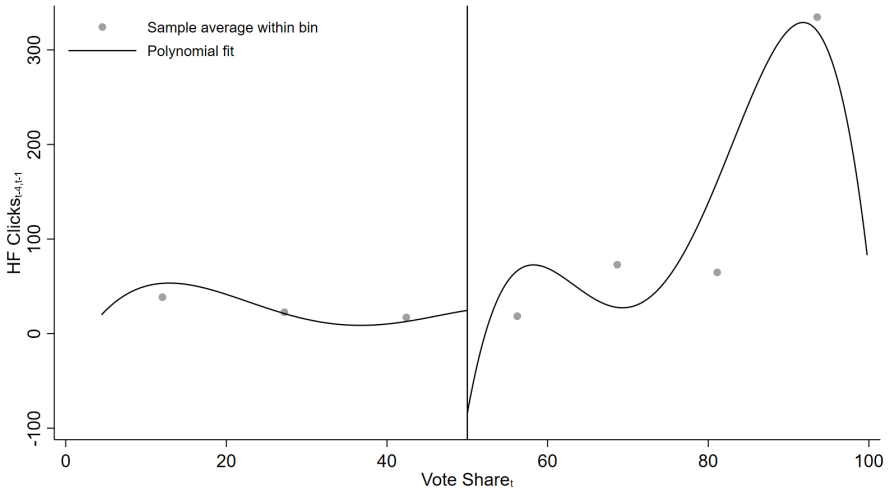


Figure IA.10: Pill Termination Proposals and Previous Hedge Fund Activity. This figure depicts the results of linear regression discontinuity models in which the dependent variable is either hedge fund clicks (Panel A) or an indicator that takes the value of 1 if the firm is targeted by an activist hedge fund in a public campaign (Panel B) in the four quarters *preceding* a meeting in which shareholders vote on a proposal to terminate an active poison pill. Following Cuñat et al. (2012); Ertimur et al. (2013), we focus on the discontinuity created by close votes—those around the 50% majority threshold for such a proposal to pass. The running variable is the *Vote Share*, which is defined as the percentage of "for" votes of the total votes cast. To address concerns about ad hoc choices of bin spacing and polynomial order, we follow the optimal data-driven methods established in Calonico et al. (2015) and use Stata's "rdrobust" off-the-shelf. We define targeted in a public campaign to be the filing of a 13D or the announcement of a proxy fight by an activist hedge fund. The sample includes all shareholder proposals to terminate an active poison pill over the period of 2003Q2 through 2017Q3, which corresponds to our main sample. Data on shareholder proposals to terminate poison pills is from FactSet, data on hedge fund clicks is collected via the methodology described in Internet Appendix Section IA.B.1, and data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang.

(A) Previous HF Clicks.



(B) Previous HF Targets.

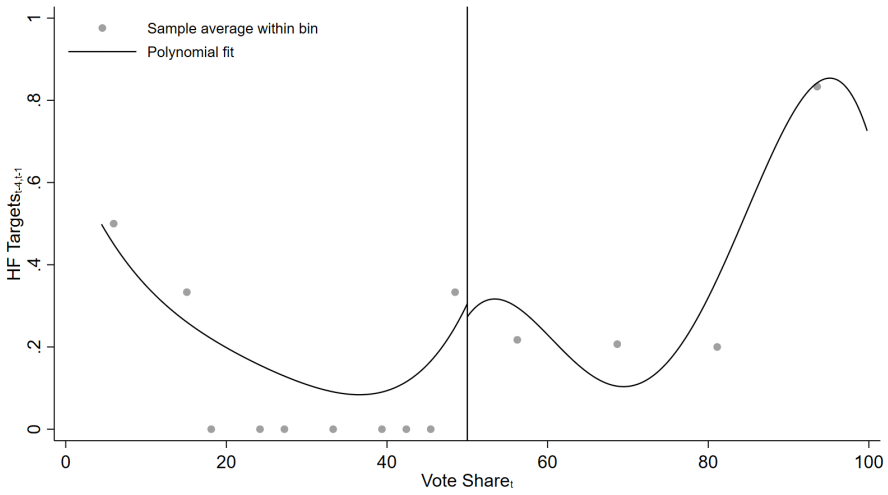
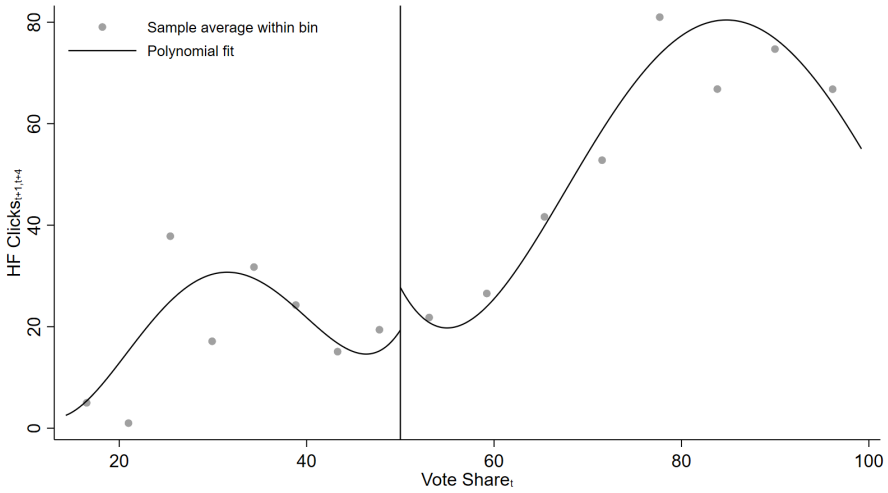


Figure IA.11: Board Declassification Proposals and Hedge Fund Activity. This figure depicts the results of linear regression discontinuity models in which the dependent variable is either hedge fund clicks (Panel A) or an indicator that takes the value of 1 if the firm is targeted by an activist hedge fund in a public campaign (Panel B) in the four quarters following a meeting in which shareholders vote on a proposal to declassify the board of directors. Following Cuñat et al. (2012) and Ertimur et al. (2013), we focus on the discontinuity created by close votes—those around the 50% majority threshold for such a proposal to pass. The running variable is the *Vote Share*, which is defined as the percentage of "for" votes of the total votes cast. To address concerns about ad hoc choices of bin spacing and polynomial order, we follow the optimal data-driven methods established in Calonico et al. (2015) and use Stata's "rdrobust" off-the-shelf. We define targeted in a public campaign to be the filing of a 13D or the announcement of a proxy fight by an activist hedge fund. The sample includes all shareholder proposals to declassify the board over the period of 2003Q2 through 2017Q3, which corresponds to our main sample. Data on shareholder proposals is from FactSet, data on hedge fund clicks is collected via the methodology described in Internet Appendix Section IA.B.1, and data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang.

(A) HF Clicks.



(B) HF Targets.

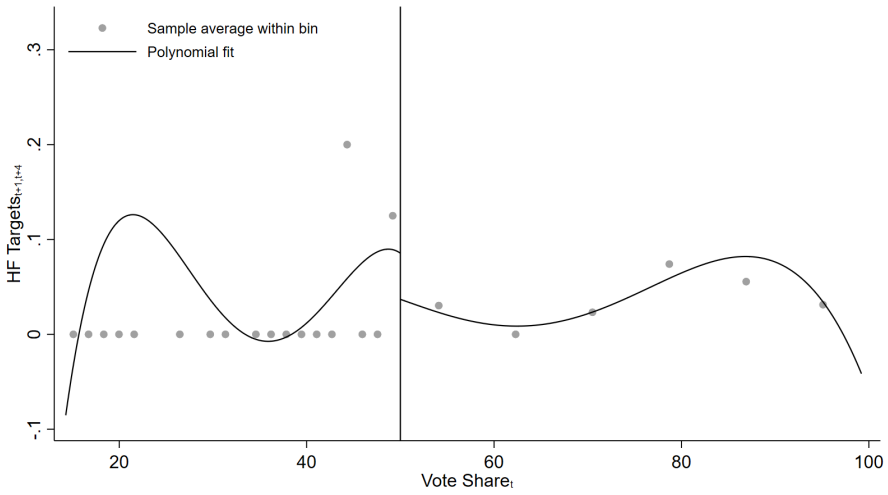
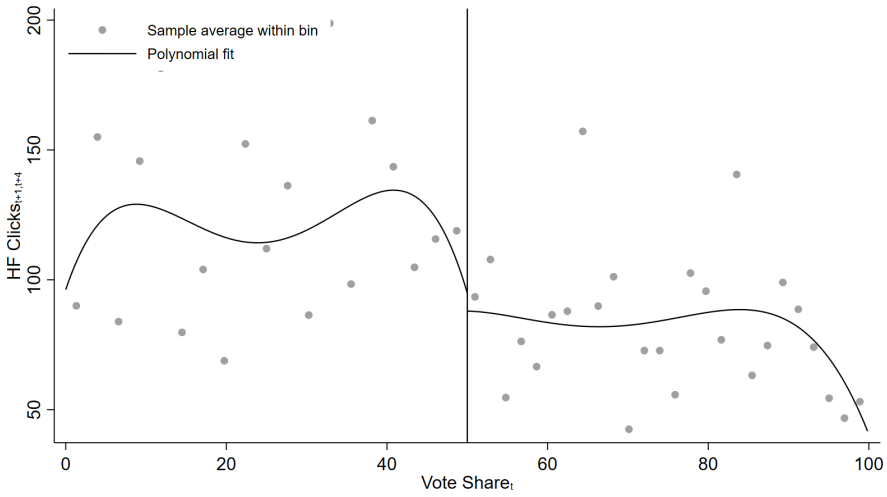


Figure IA.12: Governance-Related Shareholder Proposals and Hedge Fund Activity. This figure depicts the results of linear regression discontinuity models in which the dependent variable is either hedge fund clicks (Panel A) or an indicator that takes the value of 1 if the firm is targeted by an activist hedge fund in a public campaign (Panel B) in the four quarters following a meeting in which shareholders vote on a proposal related to governance. Following Cuñat et al. (2012) and Ertimur et al. (2013), we focus on the discontinuity created by close votes—those around the 50% majority threshold for such a proposal to pass. The running variable is the *Vote Share*, which is defined as the percentage of "for" votes of the total votes cast. To address concerns about ad hoc choices of bin spacing and polynomial order, we follow the optimal data-driven methods established in Calonico et al. (2015) and use Stata's "rdrobust" off-the-shelf. We define targeted in a public campaign to be the filing of a 13D or the announcement of a proxy fight by an activist hedge fund. The sample includes all shareholder proposals related to governance over the period of 2003Q2 through 2017Q3, which corresponds to our main sample. We exclude governance-related proposals that nearly always pass (greater than 95% of the time) or nearly always fail (greater than 95% of the time). Data on shareholder proposals is from FactSet, data on hedge fund clicks is collected via the methodology described in Internet Appendix Section IA.B.1, and data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang.

(A) HF Clicks.



(B) HF Targets.

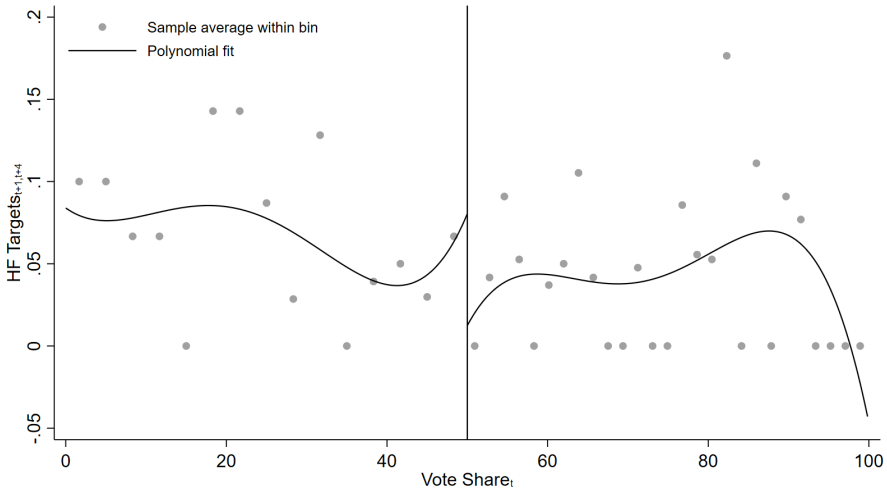


Table IA.1: Hedge Fund Clicks and Public Activism Campaigns. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if firm i is targeted by focal Hedge Fund j in quarter t, and 0 otherwise. The main independent variable of interest, *Focal Hedge Fund Clicks*$_{i,j,t-1}$ *(100s)*, is the number of clicks by the focal (campaign-starting) hedge fund j on firm i at time $t-1$. The sample includes firm-fund-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. All variables are defined in Table A.1 of the main paper. Data on poison pill adoptions is hand-collected from firm SEC filings as described in Section 2, data on hedge fund clicks is collected via the methodology described in Section IA.B.1, data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	Activist Target by Focal HF$_t$ (Indicator)					
	(1)	(2)	(3)	(4)	(5)	(6)
Focal Hedge Fund Clicks$_{t-1}$ (100s)	0.002***	0.002***	0.001**	0.001**		
	(0.000)	(0.000)	(0.000)	(0.000)		
log(1+ Focal Hedge Fund Clicks$_{t-1}$)					0.002***	
					(0.001)	
$\sinh^{-1}$(Focal Hedge Fund Clicks$_{t-1}$)						0.002***
						(0.001)
Year-Quarter FE	Yes	Yes	Yes	No	No	No
Firm FE	No	Yes	No	No	No	No
Fund FE	No	Yes	No	No	No	No
Firm × Fund FE	No	No	Yes	Yes	Yes	Yes
Firm × Year-Quarter FE	No	No	No	Yes	Yes	Yes
Fund × Year-Quarter FE	No	No	No	Yes	Yes	Yes
$\bar{y}$	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Observations	4,975,511	4,975,489	4,974,025	4,970,673	4,970,673	4,970,673
R^2	0.00	0.00	0.05	0.10	0.10	0.10

Table IA.2: Placebo Test: Clicks by Targeting vs Non-Targeting Hedge Funds. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if firm i is targeted by focal Hedge Fund j in quarter t, and 0 otherwise. *Focal Hedge Fund Clicks*$_{i,j,t-1}$ *(100s)* is the number of clicks by the focal (campaign-starting) hedge fund j on firm i at time $t-1$. The main independent variable of interest, *All Other Hedge Fund Clicks* $_{i,k\neq j,t-1}$ *(100s)*, is the total number of all other, non-targeting hedge funds' clicks on firm i at $t-1$. The sample includes firm-fund-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. All variables are defined in Table A.1 of the main paper. Data on poison pill adoptions is hand-collected from firm SEC filings as described in Section 2, data on hedge fund clicks is collected via the methodology described in Section IA.B.1, data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	Activist Target by Focal HF$_t$ (Indicator)					
	(1)	(2)	(3)	(4)	(5)	(6)
Focal Hedge Fund Clicks$_{t-1}$ (100s)	0.002***	0.002***	0.001**	0.001**		
	(0.000)	(0.000)	(0.000)	(0.000)		
All Other Hedge Fund Clicks$_{t-1}$ (100s)	-0.000	-0.000	0.000	0.000		
	(0.000)	(0.000)	(0.000)	(0.000)		
log(1+ Focal Hedge Fund Clicks$_{t-1}$)					0.002***	
					(0.001)	
log(1+ All Other Hedge Fund Clicks$_{t-1}$)					0.000	
					(0.000)	
$\sinh^{-1}$(Focal Hedge Fund Clicks$_{t-1}$)						0.002***
						(0.001)
$\sinh^{-1}$(All Other Hedge Fund Clicks$_{t-1}$)						0.000
						(0.000)
Year-Quarter FE	Yes	Yes	Yes	No	No	No
Firm FE	No	Yes	No	No	No	No
Fund FE	No	Yes	No	No	No	No
Firm × Fund FE	No	No	Yes	Yes	Yes	Yes
Industry × Year-Quarter FE	No	No	No	Yes	Yes	Yes
Fund × Year-Quarter FE	No	No	No	Yes	Yes	Yes
$\bar{y}$	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Observations	4,975,511	4,975,489	4,974,025	4,973,863	4,973,863	4,973,863
R^2	0.00	0.00	0.05	0.06	0.06	0.06

Table IA.3: Poison Pill Adoption and Bloomberg HeatDex. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if a firm becomes a public activism target (Column (1)), adopts any pill (Column (2)), or adopts an anti-activist pill (Column (3)) in quarter t, and 0 otherwise. The independent variables of interest are *Hedge Fund Clicks* and the Bloomberg Heatdex, which is constructed following Ben-Rephael et al., 2017 and measures attention on Bloomberg. Bloomberg's attention data is available only after February 17, 2010. Bloomberg Heatdex ranges from 1 to 4, where 4 is assigned to stocks with the greatest attention. The sample includes firm-quarter observations over the period of 2010Q2 through 2017Q3, which corresponds to the time period in which both the EDGAR log file data and Bloomberg Heatdex data are available. All variables are defined in Table A.1 of the main paper. Data on poison pill adoptions is hand-collected from firm SEC filings as described in Section 2, data on hedge fund clicks is collected via the methodology described in Section IA.B.1, data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	Activism Target$_t$ (Indicator)	Pill Adoption$_t$ (Indicator)	
Poison Pill Type =		All	Anti-Activist
	(1)	(2)	(3)
Hedge Fund Clicks$_{t-1}$ (100s)	0.008***	0.003**	0.002*
	(0.003)	(0.001)	(0.001)
Bloomberg HeatDex$_{t-1}$	-0.000	-0.000	0.000
	(0.001)	(0.000)	(0.000)
Total Clicks$_{t-1}$ (1,000,000s)	-0.020	0.001	0.005
	(0.020)	(0.006)	(0.005)
Controls	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
Industry × Quarter FE	Yes	Yes	Yes
$\bar{y}$	0.0142	0.0046	0.0021
Observations	73,409	73,409	73,409
R^2	0.15	0.15	0.15

Table IA.4: Poison Pill Adoption, Hedge Fund Clicks, and the Impact of Outliers. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if a firm adopted any poison pill (columns (1)–(3)) or an anti-activist poison pill (Columns (4)–(6)) in quarter t, and 0 otherwise. The main independent variable of interest is *Hedge Fund Clicks* (as well as the log and hyperbolic sine transformations), which is equal to the number of views of SEC public filings (clicks) by activist hedge funds in quarter $t-1$. The sample includes firm-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. All variables are defined in Table A.1 of the main paper. Data on poison pill adoptions is hand-collected from firm SEC filings as described in Section 2, data on hedge fund clicks is collected via the methodology described in Section IA.B.1, data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

Poison Pill Type =	Pill Adoption$_t$ (Indicator)					
	All			Anti-Activist		
	(1)	(2)	(3)	(4)	(5)	(6)
Winsorized Hedge Fund Clicks$_{t-1}$	0.0041**			0.0036***		
	(0.0017)			(0.0012)		
log(1+ Hedge Fund Clicks$_{t-1}$)		0.0057***			0.0049***	
		(0.0021)			(0.0016)	
$\sinh^{-1}$(Hedge Fund Clicks$_{t-1}$)			0.0047***			0.0039***
			(0.0017)			(0.0013)
Total Clicks$_{t-1}$ (100,000s)	0.0099	0.0089	0.0084	0.0062	0.0054	0.0051
	(0.0075)	(0.0072)	(0.0072)	(0.0066)	(0.0063)	(0.0063)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0058	0.0058	0.0058	0.0014	0.0014	0.0014
Observations	175,122	175,122	175,122	175,122	175,122	175,122
R^2	0.10	0.10	0.10	0.12	0.12	0.12

Table IA.5: Poison Pill Adoptions and Hedge Fund Clicks Controlling for Time-Varying Unobserved Heterogeneity in Hedge Funds and Selection in Firm and Hedge Fund Matching. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if a firm adopted any poison pill (columns (1)–(3)) or an anti-activist poison pill (Columns (4)–(6)) in quarter t, and 0 otherwise. The main independent variable of interest is *Hedge Fund Clicks* (as well as the log and hyperbolic sine transformations), which is equal to the number of views of SEC public filings (clicks) by activist hedge funds in quarter $t-1$. We control for unobserved time-varying heterogeneity in hedge funds by including a fund by year-quarter fixed effect, and for firm-hedge fund matching by including a firm by fund fixed effect. Because poisons pills vary only at the firm-quarter level, and not the firm-fund-quarter level, we cannot include firm by year-quarter fixed effects. The sample includes firm-fund-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. All variables are defined in Table A.1 of the main paper. Data on poison pill adoptions is hand-collected from firm SEC filings as described in Section 2, data on hedge fund clicks is collected via the methodology described in Section IA.B.1, data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

Poison Pill Type =	Pill Adoption$_t$ (Indicator)					
	All			Anti-Activist		
	(1)	(2)	(3)	(4)	(5)	(6)
Hedge Fund Clicks$_{t-1}$ (100s)	0.004**			0.003**		
	(0.001)			(0.001)		
log(1+ Hedge Fund Clicks$_{t-1}$)		0.006***			0.005**	
		(0.002)			(0.002)	
$\sinh^{-1}$(Hedge Fund Clicks$_{t-1}$)			0.005***			0.004**
			(0.002)			(0.002)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm × Fund FE	Yes	Yes	Yes	Yes	Yes	Yes
Fund × Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0061	0.0061	0.0061	0.0021	0.0021	0.0021
Observations	4,489,580	4,489,580	4,489,580	4,489,580	4,489,580	4,489,580
R^2	0.15	0.15	0.15	0.17	0.17	0.17

Table IA.6: Poison Pill Adoption and Rolling Weighted Hedge Fund Clicks. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if a firm adopted any poison pill (Panel A) or an anti-activist poison pill (Panel B) in quarter t, and 0 otherwise. The independent variables of interest are hedge fund clicks, weighted by a 3-year rolling average of fund characteristics. *Demeaned HF Clicks* subtract the three-year rolling average of clicks by a particular hedge fund. *13F Decile* is the decile of total fund assets in 13F holdings. The *Number of Campaigns* is the total number of activism (13D or proxy fight) campaigns. *Percent Success* is the number of campaigns in which a a fund achieved its stated goal, divided by the number of campaigns with a specifically stated goal. *Percent Proxy Fight* is the number of campaigns with a proxy fight divided by the total number of campaigns. *Age* is the time since the activist's first campaign. The sample includes firm-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. All variables are defined in Table A.1 of the main paper. Data on poison pill adoptions is hand-collected from firm SEC filings as described in Section 2, data on hedge fund clicks is collected via the methodology described in Section IA.B.1, data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	Poison Pill Adoption$_t$ (Indicator)					
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: All Poison Pills						
Demeaned HF Clicks$_{t-1}$	0.003**					
	(0.001)					
13F Decile Weighted HF Clicks$_{t-1}$		0.003*				
		(0.001)				
Number of Campaigns Weighted HF Clicks$_{t-1}$			0.000			
			(0.000)			
Percent Success Weighted HF Clicks$_{t-1}$				0.004		
				(0.002)		
Percent Proxy Fight Weighted HF Clicks$_{t-1}$					0.003	
					(0.002)	
Age Weighted HF Clicks$_{t-1}$						0.003**
						(0.001)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0058	0.0058	0.0058	0.0058	0.0058	0.0058
Observations	175,122	175,122	175,122	175,122	175,122	175,122
R^2	0.10	0.10	0.10	0.10	0.10	0.10
Panel B: Anti-Activist Poison Pills						
Demeaned HF Clicks$_{t-1}$	0.002*					
	(0.001)					
13F Decile Weighted HF Clicks$_{t-1}$		0.003**				
		(0.001)				
Number of Campaigns Weighted HF Clicks$_{t-1}$			0.001**			
			(0.000)			
Percent Success Weighted HF Clicks$_{t-1}$				0.004**		
				(0.002)		
Percent Proxy Fight Weighted HF Clicks$_{t-1}$					0.002*	
					(0.001)	
Age Weighted HF Clicks$_{t-1}$						0.002*
						(0.001)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014
Observations	175,122	175,122	175,122	175,122	175,122	175,122
R^2	0.12	0.12	0.11	0.12	0.11	0.12

Table IA.7: Poison Pill Adoption and Full Sample Weighted Hedge Fund Clicks. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if a firm adopted any poison pill (Panel A) or an anti-activist poison pill (Panel B) in quarter t, and 0 otherwise. The independent variables of interest are hedge fund clicks weighted by a full-sample historical average of fund characteristics. *Demeaned HF Clicks* subtract the historical average of clicks by a particular hedge fund. *13F Decile* is the decile of total fund assets in 13F holdings. The *Number of Campaigns* is the total number of activism (13D or proxy fight) campaigns. *Percent Success* is the number of campaigns in which a a fund achieved its stated goal, divided by the number of campaigns with a specifically stated goal. *Percent Proxy Fight* is the number of campaigns with a proxy fight divided by the total number of campaigns. *Age* is the time since the activist's first campaign. The sample includes firm-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. All variables are defined in Table A.1 of the main paper. Data on poison pill adoptions is hand-collected from firm SEC filings as described in Section 2, data on hedge fund clicks is collected via the methodology described in Section IA.B.1, data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	Poison Pill Adoption$_t$ (Indicator)				
	(1)	(2)	(3)	(4)	(5)
Panel A: All Poison Pills					
Demeaned HF Clicks$_{t-1}$	0.003**				
	(0.001)				
13F Decile Weighted HF Clicks$_{t-1}$		0.003*			
		(0.002)			
Number of Campaigns Weighted HF Clicks$_{t-1}$			0.001		
			(0.001)		
Percent Success Weighted HF Clicks$_{t-1}$				0.004*	
				(0.002)	
Percent Proxy Fight Weighted HF Clicks$_{t-1}$					0.002*
					(0.001)
Controls	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes
Industry × Quarter FE	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0058	0.0058	0.0058	0.0058	0.0058
Observations	175,122	175,122	175,122	175,122	175,122
R^2	0.10	0.10	0.10	0.10	0.10
Panel B: Anti-Activist Poison Pills					
Demeaned HF Clicks$_{t-1}$	0.002**				
	(0.001)				
13F Decile Weighted HF Clicks$_{t-1}$		0.003**			
		(0.001)			
Number of Campaigns Weighted HF Clicks$_{t-1}$			0.001*		
			(0.001)		
Percent Success Weighted HF Clicks$_{t-1}$				0.004**	
				(0.002)	
Percent Proxy Fight Weighted HF Clicks$_{t-1}$					0.002**
					(0.001)
Controls	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes
Industry × Quarter FE	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0014	0.0014	0.0014	0.0014	0.0014
Observations	175,122	175,122	175,122	175,122	175,122
R^2	0.12	0.12	0.12	0.12	0.12

Table IA.8: Hedge Fund Activism, Anti-Activist Poison Pills, and Director Turnover. This table reports the results of linear regression models in which the dependent variable is an indicator variable equal to 1 if the firm experiences the departure of a director in quarter t, and 0 otherwise. The sample includes firm-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. The main variables of interest are indicators equal to 1 if a firm adopts a poison pill, experiences an activist filing a Schedule 13D, or experiences an activist announcing a proxy contest. All variables are defined in Table A.1 of the main paper. Data on director turnover is from BoardEx. Data on poison pill adoptions is hand-collected from firm SEC filings as described in Section 2, data on hedge fund clicks is collected via the methodology described in Section IA.B.1, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	Director Turnover$_t$ (Indicator)			
	(1)	(2)	(3)	(4)
Anti-Activist Pill$_{t-3,t-1}$	0.036**		0.038***	
	(0.014)		(0.014)	
Activism Target$_{t-3,t-1}$	0.029***			
	(0.005)			
Proxy Fight$_{t-3,t-1}$			0.077***	
			(0.014)	
Anti-Activist Pill$_{t-4,t-1}$		0.028**		0.030**
		(0.012)		(0.012)
Activism Target$_{t-4,t-1}$		0.029***		
		(0.004)		
Proxy Fight$_{t-4,t-1}$				0.072***
				(0.012)
Controls	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year × Quarter FE	Yes	Yes	Yes	Yes
Observations	175,122	175,122	175,122	175,122
R^2	0.08	0.08	0.08	0.08

Table IA.9: Hedge Fund Interest, Poison Pill Adoption, and Subsample Splits. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if the firm adopts any type of poison pill or an anti-activist poison pill. The sample includes firm-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. We split the sample into subsamples at the sample median of size (log market capitalization). All variables are defined in Table A.1 of the main paper. Data on poison pill adoptions is hand-collected from firm SEC filings as described in Section 2, data on hedge fund clicks is collected via the methodology described in Section IA.B.1, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	Poison Pill Adoption$_t$ (Indicator)			
Poison Pill Type =	All		Anti-Activist	
Size =	Large	Small	Large	Small
	(1)	(2)	(3)	(4)
Hedge Fund Clicks$_{t-1}$ (100s)	0.004***	-0.002	0.003**	-0.003
	(0.002)	(0.003)	(0.001)	(0.002)
F-stat: HF Clicks (Large − Small)		3.197		5.424
(p-value)		(0.07)		(0.02)
Controls	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Industry × Quarter FE	Yes	Yes	Yes	Yes
$\bar{y}$	0.0044	0.0071	0.0013	0.0016
Observations	85,907	85,199	85,907	85,199
R^2	0.15	0.16	0.17	0.18

Table IA.10: Hedge Fund Interest and Poison Pill Adoptions - Excluding Takeover Bids and Rumors. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if the firm adopts a poison pill in quarter t, and 0 otherwise. The sample includes firm-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. The main independent variable of interest is *Hedge Fund Clicks*, which is equal to the number of views of SEC public filings (clicks) by activist hedge funds in quarter $t-1$. The table excludes time periods around an actual takeover bid (Columns (1) and (4)), or a rumored bid (Column (2) and (5)), or both (Column (3) and (6)). All variables are defined in Table A.1 of the main paper. Data on poison pill adoptions is hand-collected from firm SEC filings as described in Section 2, data on hedge fund clicks is collected via the methodology described in Section IA.B.1, data on takeover bids is from SDC Platinum while data on rumored bids is hand-collected from news reports, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	Pill Adoption$_t$ (Indicator)			Anti-Activist Pill Adoption$_t$ (Indicator)		
	(1)	(2)	(3)	(4)	(5)	(6)
Hedge Fund Clicks$_{t-1}$ (100s)	0.0039***	0.0024**	0.0026**	0.0029***	0.0015*	0.0017*
	(0.0013)	(0.0012)	(0.0013)	(0.0011)	(0.0009)	(0.0009)
Total Clicks$_{t-1}$ (100,000s)	0.0074	0.0077	0.0079	0.0045	0.0056	0.0060
	(0.0069)	(0.0066)	(0.0068)	(0.0062)	(0.0060)	(0.0061)
Excludes =	Bids	Rumors	Both	Bids	Rumors	Both
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0056	0.0052	0.0052	0.0014	0.0012	0.0012
Observations	171,773	174,824	171,562	171,773	174,824	171,562
R^2	0.10	0.10	0.10	0.12	0.12	0.12

Table IA.11: Hedge Fund Interest, Poison Pill Adoption, and Public Activism Campaigns - Excluding Takeover Bids and Rumors. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if the firm is targeted by an activist hedge fund in a public campaign in quarter t, and 0 otherwise. We define targeted in a public campaign to be the filing of a 13D or the announcement of a proxy fight by an activist hedge fund. The sample includes firm-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. The main independent variable of interest is *Hedge Fund Clicks*, which is equal to the number of views of SEC public filings (clicks) by activist hedge funds in quarter $t-1$ and $t-2$ interacted with the adoption of a poison pill in quarter $t-1$. The table excludes time periods around both actual takeover bids and rumored bids. All variables are defined in Table A.1 of the main paper. Data on poison pill adoptions is hand-collected from firm SEC filings as outlined in Section 2, data on hedge fund clicks is collected via the methodology described in Section IA.B.1, data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang, data on takeover bids is from SDC Platinum while data on rumored bids is hand-collected from news reports, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

Poison Pill Type =	Activism Target$_t$ (Indicator)							
	All		I(Trigger $\leq 10\%$)	NOL	AIC	Synthetic equity	Anti-Activist	Non-Activist
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Hedge Fund Clicks$_{t-1,t-2}$ (100s)	0.005***	0.005***	0.005***	0.005***	0.005***	0.005***	0.005***	0.005***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Poison Pill Adoption$_{t-1}$	0.006	0.008	0.007	0.018	0.013	0.005	0.010	0.006
	(0.006)	(0.006)	(0.012)	(0.017)	(0.018)	(0.012)	(0.014)	(0.006)
Hedge Fund Clicks$_{t-1,t-2}\times$ Poison Pill Adoption$_{t-1}$		-0.005*	-0.008**	-0.009**	-0.008**	-0.011***	-0.008**	0.010
		(0.003)	(0.003)	(0.004)	(0.003)	(0.003)	(0.003)	(0.015)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry $\times$ Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0126	0.0126	0.0126	0.0126	0.0126	0.0126	0.0126	0.0126
Observations	171,562	171,562	171,562	171,562	171,562	171,562	171,562	171,562
R^2	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Table IA.12: Hedge Fund Interest and Poison Pill Adoptions by Activist Objective. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if the firm adopts a poison pill in quarter t, and 0 otherwise. The sample includes firm-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. The main independent variable of interest is *Hedge Fund Clicks*, which is equal to the number of views of SEC public filings (clicks) by activist hedge funds in quarter $t-1$. The table further splits the number of hedge fund clicks by the stated objective (rows 1-6, and row 9) and outcome (rows 7-8, and row 10) of activist hedge funds from Item 4 of their 13D filings. Each subgroup of hedge fund clicks is scaled by its respective standard deviation in order to readily compare the coefficients. All variables are defined in Table A.1. Data on poison pill adoptions is hand-collected from firm SEC filings, data on hedge fund clicks is collected via the methodology described in Internet Appendix Section IA.B.1, data on the objectives and outcomes of activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson and Wei Jiang, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. The mode of "sale outcome" is equal to 1 when more than or equal to 50% of hedge fund campaigns ended in a sale. A campaign is considered to end in a sale if an indicator for "merger in 18" in Boyson et al. (2022) is 1, or a hedge fund requested, and succeeded in, pushing for a merger as defined in Bebchuk et al. (2015), or the firm was taken over (regardless of whether this was the activist's objective or not), as defined in Bebchuk et al. (2015). Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	Pill Adoption$_t$ (Indicator)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Hedge Fund Clicks$_{t-1}$ (Mode = Sale Objective)	0.00033	0.00028	0.00028				
	(0.00023)	(0.00023)	(0.00023)				
Hedge Fund Clicks$_{t-1}$ (Mode = All Other)		0.00097**					
		(0.00038)					
Hedge Fund Clicks$_{t-1}$ (Mode = General Objective)			0.00065*				
			(0.00035)				
Hedge Fund Clicks$_{t-1}$ (Mode = Capital Structure Objective)			0.00036				
			(0.00030)				
Hedge Fund Clicks$_{t-1}$ (Mode = Business Strategy Objective)			-0.00010				
			(0.00018)				
Hedge Fund Clicks$_{t-1}$ (Mode = Governance Objective)			0.00044				
			(0.00031)				
Hedge Fund Clicks$_{t-1}$ (Mode = Completed Sale)				0.00073**	0.00056*		
				(0.00030)	(0.00029)		
Hedge Fund Clicks$_{t-1}$ (Mode = No Completed Sale)					0.00074**		
					(0.00035)		
Percent Sale Objective Weighted HF Clicks$_{t-1}$						0.00003**	
						(0.00001)	
Percent Completed Sale Weighted HF Clicks$_{t-1}$							0.00001
							(0.00001)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0058	0.0058	0.0058	0.0058	0.0058	0.0058	0.0058
Observations	175,122	175,122	175,122	175,122	175,122	175,122	175,122
R^2	0.10	0.10	0.10	0.10	0.10	0.10	0.10

Table IA.13: Hedge Fund Interest and Poison Pill Adoptions - Excluding Public Campaigns in the Year Prior. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if the firm adopts a poison pill in quarter t, and 0 otherwise. The sample includes firm-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. The main independent variable of interest is *Hedge Fund Clicks*, which is equal to the number of views of SEC public filings (clicks) by activist hedge funds in quarter $t-1$. The table excludes poison pill adoptions for firm-quarters that experienced a public activism campaign in the full calendar year prior. All variables are defined in Table A.1 of the main paper. Data on poison pill adoptions is hand-collected from firm SEC filings as described in Section 2, data on hedge fund clicks is collected via the methodology described in Section IA.B.1, data on takeover bids is from SDC Platinum while data on rumored bids is hand-collected from news reports, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

		Anti-Activist Provisions					Other Provisions		
Poison Pill Type =	All	I(Trigger $\leq 10\%$)	NOL	AIC	Synthetic equity	Anti-Activist	I(Trigger $> 10\%$)	Chewable	Non-Activist
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Hedge Fund Clicks$_{t-1}$ (100s)	0.003***	0.003***	0.002*	0.001**	0.002**	0.003***	0.000	0.000	0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)
Total Clicks$_{t-1}$ (1,000,000s)	0.001	-0.003	-0.002	-0.002	-0.002	-0.002	0.004	0.001	0.003
	(0.004)	(0.003)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.002)	(0.003)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0053	0.0015	0.0009	0.0007	0.0012	0.0012	0.0038	0.0012	0.0041
Observations	166,980	166,980	166,980	166,980	166,980	166,980	166,980	166,980	166,980
R^2	0.11	0.12	0.12	0.12	0.10	0.12	0.11	0.11	0.10

Table IA.14: Hedge Fund Interest, Poison Pill Adoption, Classified Boards, and Public Activism Campaigns. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if the firm is targeted by an activist hedge fund in a public campaign in quarter t, and 0 otherwise. We define targeted in a public campaign to be the filing of a 13D or the announcement of a proxy fight by an activist hedge fund. The sample includes firm-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. The main independent variable of interest is *Hedge Fund Clicks*, which is equal to the number of views of SEC public filings (clicks) by activist hedge funds in quarter $t-1$ and $t-2$ interacted with the adoption of a poison pill in quarter $t-1$. The table includes results that include a triple interaction between hedge funds clicks, poison pills, and classified boards. All variables are defined in Table A.1 of the main paper. Data on poison pill adoptions is hand-collected from firm SEC filings as outlined in Section 2, data on hedge fund clicks is collected via the methodology described in Section IA.B.1, data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang, data on classified boards is from Guernsey et al. (2024), and data on firm financials is taken from CRSP/Compustat Merged Quarterly. For brevity, the coefficients for the other double interaction terms are omitted from the table. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

Poison Pill Type =	Activism Target$_t$ (Indicator)							
	All		I(Trigger $\leq$ 10%)	NOL	AIC	Synthetic equity	Anti-Activist	Non-Activist
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Hedge Fund Clicks$_{t-1,t-2}$ (100s)	0.005***	0.006***	0.006***	0.006***	0.005***	0.006***	0.006***	0.005***
	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Poison Pill Adoption$_{t-1}$	0.011*	0.014	-0.002	0.010	0.027	-0.009	0.002	0.015
	(0.006)	(0.009)	(0.014)	(0.020)	(0.026)	(0.013)	(0.016)	(0.011)
Hedge Fund Clicks$_{t-1,t-2}\times$ Poison Pill Adoption$_{t-1}$		-0.010***	-0.009***	-0.010**	-0.013**	-0.010***	-0.010***	0.005
		(0.003)	(0.003)	(0.004)	(0.006)	(0.003)	(0.004)	(0.020)
Classified Board$_{t-1}$	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Hedge Fund Clicks$_{t-1,t-2}\times$ Classfied Board$_{t-1}$		-0.002	-0.002	-0.002	-0.001	-0.001	-0.002	-0.001
		(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Poison Pill Adoption$_{t-1}\times$ Classified Board$_{t-1}$		-0.001	0.017	0.033	-0.043	0.032	0.024	-0.004
		(0.013)	(0.027)	(0.046)	(0.030)	(0.023)	(0.035)	(0.014)
Hedge Fund Clicks$_{t-1,t-2}\times$ Poison Pill Adoption$_{t-1}\times$ Classified Board$_{t-1}$		0.007	0.016	0.028	0.001	-0.018**	0.011	-0.014
		(0.015)	(0.033)	(0.057)	(0.008)	(0.009)	(0.035)	(0.024)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry $\times$ Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136
Observations	175,122	175,122	175,122	175,122	175,122	175,122	175,122	175,122
R^2	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Table IA.15: Hedge Fund Interest, Poison Pill Adoption, Advance Notice Bylaws, and Public Activism Campaigns. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if the firm is targeted by an activist hedge fund in a public campaign in quarter t, and 0 otherwise. We define targeted in a public campaign to be the filing of a 13D or the announcement of a proxy fight by an activist hedge fund. The sample includes firm-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. The main independent variable of interest is *Hedge Fund Clicks*, which is equal to the number of views of SEC public filings (clicks) by activist hedge funds in quarter $t-1$ and $t-2$ interacted with the adoption of a poison pill in quarter $t-1$. The table includes results that include a triple interaction between hedge funds clicks, poison pills, and advanced notice bylaw provisions. All variables are defined in Table A.1 of the main paper. Data on poison pill adoptions is hand-collected from firm SEC filings as outlined in Section 2, data on hedge fund clicks is collected via the methodology described in Section IA.B.1, data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang, data on advance notice bylaws is from Factset, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. For brevity, the coefficients for the other double interaction terms are omitted from the table. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	Activism Target$_t$ (Indicator)							
Poison Pill Type =	All		I(Trigger $\leq$ 10%)	NOL	AIC	Synthetic equity	Anti-Activist	Non-Activist
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Hedge Fund Clicks$_{t-1,t-2}$ (100s)	0.005***	0.006***	0.006***	0.006***	0.006***	0.006***	0.006***	0.006***
	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Poison Pill Adoption$_{t-1}$	0.011*	0.007	-0.012	-0.003	0.007	0.013	-0.011	0.012
	(0.006)	(0.007)	(0.012)	(0.017)	(0.018)	(0.015)	(0.013)	(0.008)
Hedge Fund Clicks$_{t-1,t-2}\times$ Poison Pill Adoption$_{t-1}$		-0.015***	-0.010***	-0.011**	-0.012**	-0.017***	-0.010***	-0.020***
		(0.003)	(0.003)	(0.004)	(0.005)	(0.004)	(0.003)	(0.006)
Advanced Notice Bylaw$_{t-1}$	0.003	0.003	0.003	0.003	0.004	0.004	0.003	0.004
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Hedge Fund Clicks$_{t-1,t-2}\times$ Advanced Notice Bylaw$_{t-1}$		-0.003	-0.003	-0.003	-0.003	-0.003	-0.003	-0.003
		(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Poison Pill Adoption$_{t-1}\times$ Advanced Notice Bylaw$_{t-1}$		0.020	0.071**	0.082*	0.001	-0.033**	0.073**	-0.005
		(0.013)	(0.033)	(0.042)	(0.040)	(0.017)	(0.035)	(0.015)
Hedge Fund Clicks$_{t-1,t-2}\times$ Poison Pill Adoption$_{t-1}$		0.023**	-0.004	-0.001	-0.000	0.014*	-0.005	0.113*
$\times$ Advanced Notice Bylaw$_{t-1}$		(0.011)	(0.010)	(0.011)	(0.016)	(0.008)	(0.011)	(0.062)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry $\times$ Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136
Observations	175,122	175,122	175,122	175,122	175,122	175,122	175,122	175,122
R^2	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Table IA.16: Poison Pills and Additional Defensive Measures. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if a firm adopted a classified board (*CB*, Columns (1) and (3)) or advance notice bylaws (*AN*, Columns (2) and (4)) concurrently with any poison pill (Columns (1) and (2)) or an anti-activist poison pill (Columns (3) and (4)), respectively. In Columns (5) and (6), the dependent variable takes the value of 1 if the firm adopted any poison pill, and in Columns (7) and (8), the dependent variable takes the value of 1 if the firm adopted an anti-activist poison pill in quarter t, and 0 otherwise. The independent variables of interest are *Hedge Fund Clicks* and the presence of either a classified board or an advance notice bylaw in quarter $t-1$.The sample includes firm-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. All variables are defined in Table A.1 of the main paper. Data on poison pill adoptions is hand-collected from firm SEC filings as described in Section 2, data on hedge fund clicks is collected via the methodology described in Section IA.B.1, data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

Poison Pill Type =	CB & PP	AN & PP	CB & PP	AN & PP	Pill Adoption$_t$ (Indicator)			
	All		Anti-Activist		All		Anti-Activist	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Hedge Fund Clicks$_{t-1}$ (100s)	0.00005	0.00005	0.00002	0.00010	0.00357***	0.00357***	0.00282***	0.00282***
	(0.00006)	(0.00010)	(0.00002)	(0.00009)	(0.00122)	(0.00122)	(0.00102)	(0.00102)
I(Classified board$_{t-1}$)					0.00054		-0.00052	
					(0.00325)		(0.00191)	
I(Advance Notice Bylaw$_{t-1}$)						0.00463		-0.00113*
						(0.00631)		(0.00065)
Hedge Fund Clicks$_{t-1}\times$ I(Classified board$_{t-1}$)					-0.00609		-0.00227	
					(0.00457)		(0.00231)	
Hedge Fund Clicks$_{t-1}\times$ I(Advance Notice Bylaw$_{t-1}$)						-0.01026		-0.00102
						(0.00806)		(0.00113)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry $\times$ Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0000	0.0001	0.0000	0.0000	0.0058	0.0058	0.0014	0.0014
Observations	175,122	175,122	175,122	175,122	175,122	175,122	175,122	175,122
R^2	0.12	0.10	0.07	0.06	0.10	0.10	0.12	0.12

Table IA.17: The Number of Hedge Funds and Anti-Activist Pill Adoptions. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if the firm adopts a poison pill with various characteristics (e.g., plans with trigger thresholds under 10%, NOL pills, etc.) in quarter t, and 0 otherwise. The sample includes firm-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. The main independent variable of interest is *Number of Hedge Funds*, which is equal to the number hedge funds with positive views of SEC public filings in quarter $t-1$. The characteristics and provisions considered in this table are described in Section 2. All variables are defined in Table A.1 of the main paper. Data on poison pill adoptions is hand-collected from firm SEC filings, data on hedge fund clicks is collected via the methodology described in Section IA.B.1, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

		Anti-Activist Provisions				
Poison Pill Type =	All	I(Trigger $\leq 10\%$)	NOL	AIC	Synthetic equity	Anti-Activist
	(1)	(2)	(3)	(4)	(5)	(6)
# of Hedge Fund$_{t-1}$ (10s)	0.004***	0.004***	0.002***	0.002***	0.003***	0.004***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Total Clicks$_{t-1}$ (100,000s)	0.002	-0.003	0.002	-0.005**	-0.005*	-0.001
	(0.007)	(0.006)	(0.006)	(0.002)	(0.003)	(0.006)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0058	0.0017	0.0010	0.0008	0.0014	0.0014
Observations	175,122	175,122	175,122	175,122	175,122	175,122
R^2	0.10	0.11	0.12	0.12	0.10	0.12

Table IA.18: The Number of Hedge Funds, Poison Pill Adoption, and Public Activism Campaigns. This table reports the results of linear regression models in which the dependent variable is an indicator that takes the value of 1 if the firm is targeted by an activist hedge fund in a public campaign in quarter t, and 0 otherwise. We define targeted in a public campaign to be the filing of a 13D or the announcement of a proxy fight by an activist hedge fund. The sample includes firm-quarter observations over the period of 2003Q2 through 2017Q3, which corresponds to the time period in which the EDGAR log file data is available. The main independent variable of interest is *Number of Hedge Funds*, which is equal to the number of hedge funds with positive views of SEC public filings in quarter $t-1$ and $t-2$ interacted with the adoption of a poison pill in quarter $t-1$. All variables are defined in Table A.1 of the main paper. Data on poison pill adoptions is hand-collected from firm SEC filings as described in Section 2, data on hedge fund clicks is collected via the methodology described in Section IA.B.1, data on activist hedge fund public campaigns is from Boyson et al. (2022) and Bebchuk et al. (2015) and was graciously shared by Nicole Boyson, Alon Brav, and Wei Jiang, and data on firm financials is taken from CRSP/Compustat Merged Quarterly. Robust standard errors, clustered at the firm level, are reported in parentheses. *,**, and *** denote significance at the 10%, 5%, and 1% level, respectively.

Poison Pill Type =	Activism Target$_t$ (Indicator)							
	All		I(Trigger $\leq 10\%$)	NOL	AIC	Synthetic equity	Anti-Activist	Non-Activist
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
# of Hedge Fund$_{t-1,t-2}$ (10s)	0.006***	0.006***	0.006***	0.006***	0.006***	0.006***	0.006***	0.006***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Poison Pill Adoption$_{t-1}$	0.010*	0.015**	0.017	0.039*	0.010	0.011	0.023	0.010
	(0.006)	(0.006)	(0.015)	(0.022)	(0.017)	(0.013)	(0.018)	(0.007)
# of Hedge Fund$_{t-1,t-2}$ × Poison Pill Adoption$_{t-1}$		-0.008**	-0.015***	-0.020**	-0.012**	-0.019***	-0.017***	0.005
		(0.004)	(0.005)	(0.008)	(0.005)	(0.006)	(0.006)	(0.011)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
$\bar{y}$	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136
Observations	167,676	167,676	167,676	167,676	167,676	167,676	167,676	167,676
R^2	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13