# The consequences to directors for deploying poison pills\*

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**Abstract:** We examine the labor market consequences for directors who adopt poison pills. These directors experience a decrease in shareholder votes, an increase in termination rates across all their directorships, and a decrease in the likelihood of new board appointments. These adverse consequences accrue especially when pill adoption is costly for the firm and are not attributable to firm-specific events that can motivate pill adoptions. Firms have positive stock price reactions when pill-associated directors die or depart from their boards, compared to zero returns for other directors. We conclude that pill-adopting directors experience a decrease in the value of their services.

JEL classifications: G34; K22; L51

**Keywords:** Poison pills, director reputation, director turnover, director labor market

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#### 1. Introduction

How consequential is a firm's adoption of a poison pill for the firm's directors? The answer to this question provides insight into both poison pills and the director labor market. The entrenchment view holds that poison pills signal directors' willingness to cater or defer to managers at shareholders' expense, including in prospective takeover bids. If directors face what Fama (1980) calls "ex post settling up" for their actions, directors who adopt pills should experience shareholder backlash and negative career consequences. The shareholders' interest view holds that pills serve primarily to improve the firm's operations or increase expected takeover premiums, implying that directors who adopt pills are valuable to shareholders and should enjoy career benefits. A third view is that the explicit adoption of a poison pill has little impact because the adoption of a pill is not meaningful or the director labor market does not react strongly to directors' actions. This view implies that directors who adopt pills should experience neither negative nor positive career consequences.

This paper examines the consequences to directors who serve on boards that adopt poison pills, and therefore provides information about how shareholders view poison pills and on how the director labor market functions. Data on how individual directors vote are not publicly available, so we focus on the career consequences to first time pill-adopting directors. These are directors who serve on boards that adopt poison pills, but who previously had never served on a pill-adopting board. The results strongly and consistently indicate that first-time pill adopters suffer negative career consequences. They have lower vote support in subsequent board elections at both the pill-adopting firm and in their other directorships. They are more likely to leave the boards on which they currently serve, and are less likely to be appointed as new directors at other firms. Pill-associated directors also have relatively low market value; when they leave any board on which they serve, e.g., via death or retirement, the average stock price reaction is positive, compared to a zero stock price reaction for departures of directors who are not associated with poison pill adoptions.

<sup>&</sup>lt;sup>1</sup> See Malatesta and Walkling (1988), Ryngaert (1988), Ryngaert and Netter (1988), and Ryngaert and Netter (1990).

<sup>&</sup>lt;sup>2</sup> See Grossman and Hart (1980), DeAngelo and Rice (1983), Comment and Schwert (1995), Danielson and Karpoff (2006), Heron and Lie (2006), Heron and Lie (2015), Cremers et al. (2019), and Eldar and Wittry (2021).

<sup>&</sup>lt;sup>3</sup>See Margotta, McWilliams and McWilliams (1990), Datta and Iskandar-Datta (1996), Coates (2000), Klausner (2013), Catan and Kahan (2016), and Catan (2019).

We conduct several tests to distinguish between selection and treatment effects in the relation between pill adoption and directors' negative career consequences. Our main results are from panel data tests that include director, industry, and year fixed effects, as well as a broad set of controls from the prior literature. The results hold with firm and firm x year fixed effects, indicating that first-time pill adopting directors experience more negative consequences than their director colleagues who serve on the same boards but previously were associated with pill adoptions. The results apply to clear day pills as well as pills adopted in response to takeover bids, toehold investments, and other acute corporate events. The results are at least as strong for pill adoptions following good firm performance compared to poor firm performance. Together, these results indicate that first-time pill adopters' negative career consequences reflect the pill's adoption and not the circumstances that lead firms to adopt pills, nor to selection effects related to characteristics of the individual director, the director's firm, the firm's industry, or the year in which the pill is adopted.

We also construct tests using a novel instrumental variable that captures arbitrary variation in firms' propensity to adopt poison pills. The instrument is based on a director's exposure – both personal and through her fellow directors – to legal developments regarding poison pills, including important court decisions and state laws that affect pills' legal status. The instrument meets the relevance criterion for strong instruments, with Kleibergen-Paap Wald F-stats well above 10 in models with director fixed effects. As described in Section 4.b, it also plausibly meets the exclusion restriction. The results of this instrumental variable test further imply that the relation between pill adoption and directors' adverse career consequences is causal. That is, first-time pill adopting directors lose votes, lose directorships, and find fewer new directorships, all because they become associated with the adoption of a poison pill.

Next, we examine an alternative measure of a pill-associated director's labor market value based on the stock price reaction to news that a director leaves a firm's board or dies. Like previous researchers (e.g. Fich and Shivdasani (2007)), we find that the unconditional average abnormal stock price reaction to a director's departure is positive. This positive stock price reaction, however, is largely attributable to pill-associated directors, i.e., directors who served on boards that adopted poison pills. We also find that the

average share price reaction to a director's death is positive, similar to results reported by Hayes and Schaefer (1999), Salas (2010) and Fracassi and Tate (2012). Once again, however, the positive share price reaction appears only in the subset of deceased directors who were associated with a previous adoption of a poison pill. The deaths of directors who were not associated with poison pill adoptions have a zero average stock price reaction. These results provide further support for the inference that directors who are associated with the adoption of a poison pill have lower values in the director labor market than other directors.

We examine several subsidiary questions about the channels and nature of the labor market consequences for pill-adopting directors. These consequences occur even controlling for the pill's specific characteristics, including pills that require a shareholder vote, pills adopted to protect a firm's net operating losses (NOL pills), short-duration pills, so-called "chewable" poison pills, and pills that are adopted to replace expiring pills. The results are not significantly related to whether the firm has a pre-existing classified board or to the stock price reaction when the pill is announced. Directors' negative career consequences are primarily associated with their first pill adoption, and much less so with their second adoptions. We find that Institutional Shareholder Services, Inc. (ISS) recommendations positively affect directors' vote support and likelihood of obtaining new board positions. Our main findings persist, however, even controlling for ISS recommendations. First-time pill adopting directors lose board positions and acquire fewer new board positions even in the years before ISS made vote recommendations, indicating that directors' labor market consequences are not driven by ISS recommendations.

Among the many firm, director, and pill characteristics we examine, the most important is that directors' consequences are more severe when they serve at mature firms than when they serve at young firms. This finding is consistent with Johnson et al.'s (2021) evidence that the value of a firm's takeover defenses is negatively related to firm age, and indicates that directors experience negative career consequences particularly when the pill's net value to the firm is negative.

Finally, we examine why – given such negative personal consequences – directors choose to adopt poison pills. Directors likely face many types of costs and benefits from serving on a board that adopts a pill. As an example, Marshall (2010) and Levit and Malenko (2016) point out that directors could incur

personal costs if they oppose a pill that management prefers. We cannot observe such personal costs, but we can observe one type of benefit to pill-adopting directors – their compensation. We find that first-time pill adopters enjoy increased compensation in the two years following adoption. These results suggest that, at the margin, directors trade off some opportunities in the director labor market for a small boost in compensation.

Together, our results reject the argument that explicit poison pills are inconsequential because all firms have latent pills. To the contrary, the actual adoption of a poison pill, particularly at a seasoned firm, imposes a meaningful career cost on the adopting directors by lowering their values in the director labor market. This finding, in turn, implies that investors view the deployment of a poison pill as an important characteristic of a firm's corporate governance, and perhaps an indicator of future board decisions, that is different from the mere option to deploy a pill.

Our findings also contribute to two additional areas of the corporate governance literature. First, by examining the impact of pill adoption on directors, we shed light on the debate over whether poison pills affect firm value, and in which direction. Our results are consistent with the lifecycle view that takeover defenses tend to decrease value at seasoned firms, although not at young firms (see Johnson et al. (2021)). Second, our tests provide new evidence on the forces that influence directors' vote support, termination, appointments, and contributions to firm value. The results show that the labor market for directors imposes reputational penalties on directors who do not act in what is perceived by shareholders as acting in the best interests of the firm, as proposed by Fama (1980).

#### 2. Data

Our data consist of a panel of 291,351 director firm-years from 2003–2015, including indications of whether and when a director sits on a board that adopts a poison pill. We use these data to conduct director-level difference-in-difference tests comparing an outcome (e.g., vote support, turnover) in the period before to the period after a director is first involved in a board's adoption of a poison pill. We refer to pill-adopting directors who previously had never served on a board that adopted a pill as "first-time"

adopters." Our main tests include director fixed effects, so our control group consists of all other directors who never previously served on a board that adopted a poison pill, or had already been associated with pill adoption before our sample period. (In Section 6.b we report on robustness tests that use alternate subgroups of directors as controls.) We focus on three outcomes that provide insight into changes in the director's value in the director labor market: vote support at all existing directorships, turnover from all existing directorships, and new directorships. In subsequent tests we also examine changes in the outcome variables within each of three subsets of a director's board positions: the firm that adopts the pill, other firms where the director serves on the board at the time the pill is adopted, and firms for which the director joins the board after the pill was adopted.

Our sample of firms that have or acquire poison pills is drawn from the Securities Data Company (SDC) Poison Pills database, and our sample of directors is drawn from the BoardEx Employment database. We exclude finance firms and utilities, as well as firms headquartered outside of the United States and those with dual class shares. We use the BoardEx Employment data to backfill directors' careers and identify directors who sat on boards that adopted poison pills back to the introduction of the pill in 1982. We merge the BoardEx Employment data with COMPUSTAT and CRSP data using firms' CUSIP identifiers. The match quality likely deteriorates when we backfill data into the 80s and 90s, possibly causing us to miss some directors' early pill adoptions. This is because the CUSIP is treated as a header variable in the BoardEx data, and BoardEx coverage is notoriously uneven before 2000 (Fracassi and Tate 2012; Engelberg, Gao, and Parsons 2013). However, Internet Appendix Table IA.1 shows that the results are similar when we restrict the sample to only those directors first appearing in BoardEx during or after the year 2000.

Table 1 reports the year-by-year number of observations during the sample period. In 2003, the sample includes 16,559 unique directors at 3,014 unique firms and 20,915 unique firm-director observations. Over the full 2003-2015 sample period, there are 35,113 unique directors at 5,237 unique firms and 291,351 firm-director observations. As reported in Table 1, firms at which directors in our sample served adopted a total of 1,732 pills before 2003, with 879 new pills adopted during our 2003–2015 sample

period. For example, 74 firms adopted poison pills in 2003, increasing to 119 pill adoptions in 2008 and declining to 27 pill adoptions in 2015.

Panel A of Table 2 reports summary statistics for several key director characteristics. Of the 35,113 unique directors in the sample, 27% served on the board of at least one firm that adopted a poison pill.<sup>4</sup> Across all director-years in the sample, the average board consists of 7.9 directors, 11.7% of whom are the firm's CEOs and 11.8% of whom are the board's chair. The average director is 59.9 years old and serves on 1.6 boards, and has served for an average of 7.1 years on each board.

Table 2 also reports descriptive statistics for our three main outcome variables. To collect vote support data, we employ a fuzzy match on director name, and manually check the results, to merge company vote results for all director elections from 2003-2015 from the Institutional Shareholder Service (ISS) Voting Analytics database. This merge yields a sample of 108,829 director-firm-year observations over the 2003–2015 period. Of these, 92,279 observations are for directors at their then-current boards. We use this smaller sample for tests regarding vote support and the unconstrained sample of 291,351 firm-director observations for tests regarding director turnover and new directorships. Constraining the sample to observations with voting data for all tests, however, yields similar results (see Internet Appendix Table IA.2).

The sample average vote support across all director-years is 79%. The unconditional likelihood that a director will turn over or exit an existing board position is 7.5% each year, and the unconditional likelihood that an existing director will be appointed to a new board in the next year is 8.2%.

Panel B of Table 2 reports on the characteristics of the firms on whose boards these directors serve. Averaging over all 38,693 firm-years in the sample, the average firm age is 17.7 years and the average market capitalization is \$2.36 billion. The current year's ROA is 4.5% and annual raw stock return is 16%, and institutional investors own an average of 56.6% of these firms' outstanding shares of stock.

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<sup>&</sup>lt;sup>4</sup> This includes directors who first became involved with a poison pill before 2003 and thus, by construction, are always in the "treated x post" group in our empirical models. Any influence of such long-time pill adopters is picked up in models with director fixed effects.

#### 3. Empirical results

#### 3.a. Director vote outcomes

We begin by examining the vote outcomes for directors at annual shareholder meetings. Cai, Garner, and Walkling (2009) report that management-nominated directors rarely fail to receive a majority vote. Nonetheless, a director's vote support indicates the strength of shareholders' support for that director, and a decrease in shareholder votes signals shareholder dissatisfaction with the director's performance. Aggarwal et al. (2019) find that, even in uncontested director elections, dissenting votes have substantial negative impacts on directors' careers, increasing the likelihood the director will leave the board or be moved to less influential positions, and decreasing the director's future opportunities in the director labor market

Although we draw inferences from multivariate tests that control for other influences on a director's vote margin, the results are illustrated in simple univariate comparisons. Again, we focus on first-time pill adopters, i.e., directors who have not previously served on boards that adopted pills. The average vote support for these directors is 90.5% in the three years before their firms adopt a poison pill, declining to 84.0% in the election immediately after the firm adopts a poison pill.

Table 3 reports on multivariate difference-in-difference tests that examine vote outcomes for first-time pill adopting directors. The dependent variable, *Voting for percentage*, is the percentage of votes for a director, as defined by Iliev et al. (2015).<sup>5</sup> *Adopting director* is set equal to one for all first-time adopting directors, and *Post* equals one for the year in which that director is first involved in the adoption of a poison pill, and for all subsequent years. All models include year fixed effects, so *Post* is not included separately. Model 1 reports that first-time adopters experience a 1.5 percentage point decrease in vote support in elections at all firms at which they served when the pill was adopted, an estimate that is statistically significant at the 1% level.

<sup>&</sup>lt;sup>5</sup> The results are similar using alternative measures of vote support, including *%Withheld* (Aggarwal et al., 2019), or *Vote margin* (percentage of votes for minus the percentage against, minus the percentage abstaining, minus broker non-votes and votes withheld).

Model 2 includes controls for director and firm characteristics that may affect vote support. The controls for director characteristics include indicator variables for whether the director is the company's CEO or Board Chair, a non-executive director, the director's age and tenure on the board, and the director's total number of directorships. Controls for firm characteristics include firm age, the natural log of book assets, the natural log of market capitalization, ROA, lagged ROA, the previous 12 months' stock return, lagged annual stock return, institutional ownership, and board size.<sup>6</sup>

As reported in Model 2, *Voting for percentage* is significantly related to several of these control variables. It is positively related to the *CEO indicator*, *Board size*, *Log of market capitalization*, *ROA*, *Lagged ROA*, *Lagged annual stock return*, and *Institutional ownership*. It is negatively related to the *Chairman indicator*, *Director age*, *Board tenure*, *Firm age*, and *Annual stock return*. The overall picture that emerges is that directors tend to enjoy higher vote support when: both they and the firm are relatively young; the director is the CEO but not the board chair and is relatively new on the board; and the firm is large, has high operating profits, and is owned by institutions.

Our key coefficient of interest, however, is for the interaction of *Adopting director x Post*. This result shows that, controlling for other firm and director characteristics, first-time pill adopters experience an average decrease in vote support of 1.6 percentage points in the years after they adopt a poison pill. The coefficient on *Adopting director* of -0.027 indicates that, in addition, adopting directors experience lower vote support throughout their director careers.

The results in Models 1 and 2 could be influenced by unobservable time invariant director characteristics, such as ability. To investigate such a possibility, Models 3 and 4 of Table 3 report coefficients from tests that include director fixed effects. The coefficient for *Adopting director x Post* of -0.034 indicates that adopting directors' post-adoption vote support is 3.4 percentage points lower than the vote support they enjoyed before their first pill adoption, on average.

the sample by more than 30%, but the results are similar.

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<sup>&</sup>lt;sup>6</sup> These control variables include those used by Cai et al. (2009) and Aggrawal et al. (2019). Some of our control variables conceivably could be influenced by the pill adoption, reflecting what Angrist and Pischke (2009) call "bad controls." Model 3 avoids this concern by including the full set of fixed effects but no controls. Internet Appendix Table A.3 adds an additional control for managerial ownership (e.g., see Stulz 1988). The use of this variable reduces

Institutional Shareholders Services, Inc. (ISS) recommendations can influence a director's vote support. We have data on ISS director recommendations for 74% of our voting sample. Model 5 uses this reduced sample and includes an indicator variable that equals one if the ISS recommendation is positive. The coefficient for *ISS supports* indicates that the average vote support is 19.9 percentage points higher when ISS recommends voting for the director than when it does not make such a recommendation. The coefficient on *Adopting director x post* remains negative and statistically significant, but falls in magnitude from -0.034 to -0.020. Internet Appendix Table IA.4 reports models with a triple interaction for *Adopting director x post x ISS supports*. The coefficient in Model 4 of this table, which includes all the control variables and director fixed effects, is 0.032 and is statistically significant at the 1% level. This result implies that the decrease in vote support occurs largely among first-time adopters whom ISS does not support and that negative ISS recommendations are a major channel by which first-time adopters' vote support declines.<sup>7</sup>

Goodman-Bacon (2018), Callaway and Sant'Anna (2020), and Baker, Larcker, and Wang (2021) note that DiD estimates can be biased when treatment is staggered and the treatment effect is heterogeneous across cohort groups or its effect is not immediate and constant over time. Such concerns apply in our setting, as the treatment (pill adoption) occurs for different first-time adopters at different points in time. It also is reasonable to suspect that the treatment effects are not the same for all directors and are not both immediate and constant. The negative impact of being associated with a poison pill, for example, could dissipate over time for directors who continue to serve and add value for their firms.

To examine the effects of any such bias, we follow the advice in Baker et al. (2021) and specify a fully saturated "event study" DiD model.<sup>8</sup> In this model, we align each first-time adopting director's vote

<sup>7</sup> In Section 6.b, we report that the results for director turnover and new board positions occur even in the years before 2005, when ISS began to make recommendations regarding poison pills. We also find that first-time adopters' vote support declines even among firms that ISS does not cover. So, while ISS recommendations affect directors' vote support, they are not the sole driver of the vote support results and are not the primary driver of first-time pill adopting directors' turnover or new board positions.

<sup>&</sup>lt;sup>8</sup> To further validate that our results are not generated by treatment effect heterogeneity, we collapse the data at the director-year level and estimate the Callaway and Sant'Anna (2020) estimator using the Stata program csdid. Internet Appendix Table IA.5 reports the simple average treatment effect for all three of our main outcome variables and Figure

support in event time and disaggregate the *Adopting director* and *Adopting director x post* variables into dummy variables for each year relative to the first-time adopter's poison pill. For the Figure 1 results, we omit all observations before year t-5 and after year t+5. However, the results are similar when we combine all event year observations before year t-5 into the year t-5 variable, and all observations after t+5 into the t+5 variable.

The results are reported in Figure 1, and show a clear negative effect on first-time adopters' vote support in the first election after their firm adopts a poison pill. In the years before pill adoption, these directors enjoy slightly higher than average vote support. The largest impacts on vote support are in years t=0, t+1, and t+2, i.e., the elections immediately following the initial adoption of the poison pill. On average, first-time adopters experience a decrease in vote support of 4.5 percentage points in their elections immediately following the pill adoption relative to other years, and a decrease of 3.5 percentage points in the following year.

To some, this evidence of a decrease in vote support will not be surprising. It is exactly what some investors say they do. It also is suggested by previous findings that directors face more withheld votes when they are unresponsive to shareholder proposals to rescind poison pills or when they renew an existing poison pill (Ertimur et al. 2018; Catan 2019). To our knowledge, however, these are the first results to show that directors lose vote support after they are involved in any type of poison pill adoption, that they lose vote support across all of their directorships, and that the it is particularly first-time poison pill adopters who lose vote support. On the poison pill adopters who lose vote support.

IA.1 reports the saturated event study results. The coefficients are smaller in magnitude but remain significant at the 5% level or lower.

<sup>&</sup>lt;sup>9</sup> For example, Dimensional Fund Advisors (2020) writes that, "Dimensional generally opposes poison pills. As a result, we may vote against the adoption of a pill and all directors at a portfolio company that put a pill in place without first obtaining shareholder approval. Votes against (or withheld votes from) directors may extend beyond the portfolio company that adopted the pill, to all boards the directors serve on."

<sup>&</sup>lt;sup>10</sup> In Section 6 we report results showing that the negative career consequences we document, including vote support, occur across different types of poison pills, including pill renewals, and that the negative career consequences are most pronounced after a director's first association with pill adoption.

#### 3.b. Director turnover

This section examines whether poison pill adoption is associated with an increased likelihood that directors lose their board seats. Table 4 reports multivariate OLS tests that are similar to those in Table 3, except the dependent variable is an indicator that equals one in a given director-year when the director departs a board on which they previously served. Table 4 reports results from linear probability models, but probit tests yield similar results (see the Internet Appendix Table IA.6). The coefficient for *Adopting director x post* is 0.085 in Model 1, indicating that first-time adopters turnover rate increases significantly after they are involved in the adoption of a poison pill.

The results in Model 2 show that director turnover is significantly related to several of the controls for director and firm characteristics. Turnover is relatively high for directors who are also the company's CEO and/or board chair, and is positively related to *Board size*, *Time until retirement*, *Number of directorships*, and lagged ROA Turnover is negatively related to *Firm age*, *Log of market capitalization*, and *ROA*. These results are similar to Aggarwal et al (2019), who find that turnover is negatively related to director age, firm size, and ROA. As in Model 1, however, directors' turnover rate increases in the period after their first-time involvement in the adoption of a poison pill, as the coefficient on *Adopting director x post* equals 0.074 and is significant at the 1% level. In Model 4, which includes director fixed effects, the coefficient on *Adopting director x post* is 0.036 and is also statistically significant. This indicates that first-time pill adopters experience an increase in their average turnover rate by 3.6 percentage points – a large increase over the sample-wide base turnover rate of 7.5%.

Model 5 includes a control for whether ISS recommended a vote for the director in the immediately preceding board election for which the director was on the ballot. The coefficient for *ISS supports* is near zero and statistically insignificant, indicating that ISS vote recommendations do not have a significant impact on director departure rates. The coefficient for *Adopting director x post* decreases in magnitude compared to Models 1-4, although it remains positive and statistically significant.

Figure 2 reports the results from a fully saturated DiD model to examine the impact on director turnover. The results show a distinct and statistically significant increase of 2.9 percentage points in first-

time adopters' turnover rates in the year following their association with a poison pill. In our sample, the unconditional average turnover rate is 7.5%. In the year after their initial association with a poison pill adoption, by comparison, directors' average turnover rate increases to 8.5%. As shown in Figure 2, this higher turnover rate persists through five years after the initial pill adoption.<sup>11</sup>

#### 3.C. New director appointments

In this section we examine a third measure of director consequences, the rate at which first-time pill adopting directors are appointed to new boards. Univariate comparisons illustrate the overall pattern, as first-time pill adopters average 0.16 new directorships per year during the three years before pill adoption, but only 0.075 new directorships per year in the three years after pill adoption.

This univariate pattern is evident also in the multivariate tests reported in Table 5. In Model 1, there is a negative and significant coefficient for *Adopting director x post* of -0.120, implying a 12.0 percentage point decline in the likelihood of a new directorship after a director adopts a pill. In Model 2 we include control variables for the director and for the firms on which a director serves. The likelihood of a new board appointment is relatively high for CEO directors, directors with more directorships, directors at older firms, and directors serving at firms with strong operating and stock price performance. The likelihood of a new board appointment is negatively related to whether the director serves as board chair, and also to the firm's *Board size*, the director's *Time until retirement* and *Board tenure*, and *Log of book assets*. These results are consistent with the findings in a sample of 779 directors by Coles and Hoi (2003), who find the likelihood that a director will be appointed to a new board is negatively related to the director's age but positively related to the number of boards on which the director currently serves and the performance of the firms at which the director serves.

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<sup>&</sup>lt;sup>11</sup> The *Adopting director* coefficients in Table 4 are influenced by a mechanical effect. By definition, directors who potentially could depart their boards when their firm adopts a poison pill (i.e., in year t=0) could not have left their boards in year t-1. The Internet Appendix (Table IA.7) reports on tests in which the first-time adopters' turnovers in the year immediately before pill adoption are excluded from the sample, and show that the magnitude of the *Adopting director* coefficient becomes smaller as this mechanical effect is attenuated. Throughout, however, the coefficient on *Adopting director x post* remains positive and statistically significant, indicating an increase in first-time adopters' rates of turnover at both the pill-adopting firm and from other boards on which they serve.

For our investigation, the key variable of interest is *Adopting director x Post*. In Model 2 the coefficient on this variable is -0.060 and is statistically significant at the 1% level. In Model 4, which includes director fixed effects, the coefficient for *Adopting director x Post* is -0.076, also significant at the 1% level. This indicates that, compared to her pre-pill experience, a director's likelihood of being appointed to a new board decreases by 7.6 percentage points after becoming associated with a poison pill adoption. Model 5 includes an indicator for whether ISS recommended voting for the particular director, using the reduced sample with such information available. The coefficient for *ISS supports* indicates that a favorable ISS recommendation is positively related to the likelihood that a director will be appointed to a new board. The coefficient on *Adopting director x post* remains significantly negative. This implies that a favorable vote recommendation from ISS partly offsets the negative impact of pill adoption on a first-time adopting director's likelihood of future board appointments.

Figure 3 reports the results from a fully saturated DiD model for future board appointments. It shows that the decrease in first-time pill adopters' likelihood of receiving new director appointments is most pronounced in the year after their pill adoption, and that the effect tapers off somewhat. Even five years after pill adoption, however, these directors are significantly less likely to be appointed to additional corporate boards than before their association with a pill adoption.

Most of the results in this paper indicate that first-time pill adopters experience a decrease in demand for their director services. For example, first-time adopters experience a decrease in vote support (Section 3.a) and pill-associated directors have relatively low value to their firms (Section 5). The turnover and new directorship results in Tables 4 and 5, however, are also consistent with a decrease in first-time adopters' supply to the director labor market. It is possible, for example, that some first-time adopters have costly experiences around the board's pill adoption that encourage them to withdraw from the director labor market. Through either a demand or supply channel, however, these results indicate that first-time adopting directors experience adverse labor market consequences.

#### 3.d. Vote outcomes and turnover at the pill-adopting and other firms

Tables 3 and 4 examine changes in first-time pill adopters' vote support and turnover rates at all firms in which they currently hold board positions. In this section we examine changes in vote support and turnover rates within each of three subsets of a director's board positions: the board of the firm that adopts the poison pill, other firms' boards on which the director serves at the time of her first pill adoption, and boards of firms to which the director is appointed after her first pill adoption.

Columns 1-3 of Table 6 report the results of tests for vote support that include our control variables for director and firm characteristics, plus director fixed effects. In Model 1 we examine changes in first-time adopters' vote support just at the firms adopting the poison pills. The coefficient for *Adopting director x Post* is -0.057 and significant at the 1% level, indicating an average decrease of 5.7 percentage points in the first-time adopter's vote support.

Model 2 reports on changes in first-time adopters' vote support at other boards on which they serve when the pill is adopted. The coefficient for *Adopting director x Post* indicates that these directors' vote support decreases by an average of 2.5 percentage points. The F-statistic for the difference between the coefficients in Models 1 and 2 is 17.35. Thus, while first-time adopting directors experience significant decreases in vote support at both the firm that adopts the poison pill and at her other directorships, the impact is significantly larger at the pill-adopting firm.

Model 3 reports on the impact on the director's vote support at boards to which she is appointed after her first-time pill adoption. Here, the coefficient is small and statistically insignificant. This indicates that first-time pill adopters do not tend to experience low vote support in any new board positions they acquire after they become associated with a pill adoption. We infer that directors experience a decrease in vote support among their existing board positions when investors learn of the directors' association with a poison pill. A director's pill association, however, is known before any new board appointment and, conditional on being selected for a new board, does not erode vote support at the new board.

Models 4-6 report on results for director turnover. The coefficient for *Adopting director x Post* of 0.055 in Model 4 indicates that the turnover rate for first-time adopters at the pill-adopting firm is 5.5

percentage points higher after pill adoption than before, controlling for other director and firm characteristics. By comparison, the coefficient for *Adopting director x Post* in Model 5 indicates that first-time adopters' turnover rate at other boards on which they serve increases by 2.4 percentage points. The F-statistic for the difference between the coefficients in Models 4 and 5 is 17.68. These results indicate that first-time adopters more likely to lose their positions on all boards on which they serve, although the increased likelihood of departure is significantly larger at the pill-adopting firm.

Model 6 reports that, among board positions acquired after their first pill adoption, first-time adopters' turnover rates *decline* significantly. So, even though pill-associated directors are less likely to acquire new board seats, conditional on being appointed to a new board, these directors do not experience lower vote support or an increase in turnover likelihood. For these new board appointments, the director's association with a poison pill is already known. Presumably, the director offers a portfolio of director services that make her an attractive candidate for the new board position, despite – or possibly because of – her previous experience with a pill (see Hermalin and Weisbach, 1998; Levit and Malenko, 2016). Thus, any new board appointments incorporate knowledge of the director's association with poison pills. The decrease in vote support and increased turnover likelihood occur only at boards for which the director's association with pill adoption is new information. It is when this information is new that it leads to incremental adverse career consequences in the director labor market.

### 4. Poison pill adoption and endogeneity

The evidence summarized in Tables 3–6 show a correlation between a director's initial involvement in the implementation of a poison pill and three types of career consequences. These directors experience lower vote margins and higher turnover rates – at both the pill-adopting firm and the director's other board seats – and lower rates of new directorships at other firms. These results hold with a broad set of controls, including year and director fixed effects, which decrease the likelihood that they reflect the influence of omitted variables. Section 6 below reports on additional tests that indicate that the relations reported in

Tables 3–6 are quite robust.<sup>12</sup> In this section, we further explore whether these directors' negative labor market consequences are caused by their association with the newly-adopted poison pill, or whether the correlation reflects selection effects.

## 4.a. Clear day pill adoption

One conjecture about a selection effect is that directors' negative career consequences are driven by the same underlying events that motivate many firms to adopt poison pills, such as takeover bids or toehold investments from potential bidders. To test this conjecture, we examine separately the effects on first-time pill adopters of clear day pills compared to all other pills. Clear day pills are pills that are adopted without any identifiable external stimulus, such as a takeover bid. We use Catan's (2019) sample to identify clear day pills. If the director consequences reflect the acute corporate events that prompt firms to adopt pills, then we should observe these consequences only in the sample of non-clear day pills. <sup>13</sup>

Panel A of Table 7 reports the results. Whether controlling for director and firm characteristics or not, the effect of poison pill adoption is similar for clear day pills and non-clear day pills for all three of our outcome measures. Including controls, first-time adopters' vote support decreases by an average of 3.6 percentage points after adoption of a clear day pill; their likelihood of turnover increases 4.1 percentage points, and their likelihood of a new directorship decreases 6.8 percentage points. None of these point estimates is significantly different from the corresponding estimate in the non-clear day pill sample. These results imply that the career consequences are due primarily to the pill adoption and not to the circumstances that motivate some firms to adopt poison pills.

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<sup>&</sup>lt;sup>12</sup> For example, Internet Appendix Table IA.8 reports tests that examine first-time adopters' consequences compared to two narrow comparison groups: (i) their peer directors in the pill-adopting firm who previously were associated with pill adoptions, and (ii) their non-pill adopting peers at the first-time adopting director's other current board appointments. The results are similar to the results in Tables 3–5.

<sup>&</sup>lt;sup>13</sup> We thank Emiliano Catan for his sample of clear day pills. We obtain similar results using the flag for clear day pills in the SDC database. Catan's (2019) hand-collected sample, however, identifies more pills as motivated by acute firm events and provides a cleaner sample of clear day pills.

#### 4.b. "Sunny day" versus "rainy day" adoption

Another circumstance that could account for both pill adoption and negative director consequences is poor firm performance. Firms are more likely to adopt a poison pill following periods of poor performance (Malatesta and Walkling 1988; Catan 2019). Directors are also more likely to suffer career consequences when they sit on boards of firms that perform poorly (Kaplan and Reishus 1990; Gilson 1990; Yermack 2004). It is possible that poor firm performance drives both pill adoptions and directors' subsequent negative labor market consequences.

To examine this possibility, we separate the sample into pill adoptions after good firm performance ("sunny day" pills) and pill adoptions after poor firm performance ("rainy day" pills). If performance drives both pill adoption and director labor market effects, our findings regarding labor market consequences will concentrate among rainy day pills and should not occur after sunny day pills.

Panel B of Table 7 reports on tests of this prediction. We use three measures of firm performance: stock returns over the two years before the pill was adopted, return on assets (ROA) in the two years before pill adoption, and Tobin's Q averaged over the two years before pill adoption. Sunny day pills are those adopted following a two-year period in which firm performance exceeds the within-sample median performance, while rainy day pills are those that are adopted following below-median firm performance.

Models 1 through 3 in Table 7 show that directors who adopt pills after periods of either good or bad performance have statistically significant declines in their vote support. The impact on vote support is actually larger for sunny day pills than rainy day pills and the difference is statistically significant using ROA to measure prior performance (Model 2). This result is inconsistent with the view that the results on shareholder vote support reflect poor firm performance.

Columns 4–9 show that the likelihood of losing a directorship and the likelihood of a new board appointment both are similar following rainy day and sunny day pills. Overall, these results indicate that the connection between pill adoption and a director's subsequent adverse labor market consequences are not driven by the adopting firm's poor performance. Again, the driving force appears to be the pill adoption itself and not the circumstances that might motivate a firm to adopt a pill.

#### 4.c. Instrumental variable tests

To further examine whether directors' adverse labor market consequences are caused by their adoption of a poison pill, we conduct tests using a new instrumental variable that controls for the endogenous nature of pill adoption. The instrument is based on a director's exposure to legal developments regarding poison pills. Following the advent of the pill in 1982, there were many challenges to its legality. Starting with the *Unocal*<sup>14</sup> and *Moran*<sup>15</sup> court decisions and continuing into the 1990s, different prominent courts variously struck down and affirmed the use of poison pills. Many states also passed explicit poison pill endorsement statutes, many times after court decisions affecting pills' legal status (Karpoff and Wittry, 2018). Pill-related court cases and state statutes typically were covered by press outlets. But, as noted by Karpoff and Malatesta (1989), press coverage of such developments was typically concentrated in local and regional newspapers.

Such location-specific yet time-varying publicity about the legal status of poison pills motivates our instrumental variable. We create an indicator instrument that equals one for director-firm years after a director is directly or indirectly (via interlocked firms) exposed to a court decision or state law that affects the legal status of poison pills. Appendix Table 2 lists the states that experienced such legal innovations and the years in which they occurred. The instrument is coded 1 for directors who serve on boards of firms that are incorporated in a state with such a legal shock, and for directors who serve on other boards with the directly shocked director. The intuition of this instrument is that directors who are exposed to pill-related information, either directly or via their peer directors, are more likely to adopt pills because the shock increases a pill's salience to these directors.

To avoid picking up a direct effect between the conditions that affect local legal developments and local firms' pill adoption, we exclude any pill adoption among firms that are incorporated in the state in

<sup>&</sup>lt;sup>14</sup> Unocal Corp. v. Mesa Petroleum Co., 493 A.2d 946, 955 (Del. 1985).

<sup>&</sup>lt;sup>15</sup> Moran v. Household Int'l, Inc., 500 A.2d 1346, 1354, 1357 (Del. 1985).

<sup>&</sup>lt;sup>16</sup> A possible concern is that Compustat's *incorp* variable displays only the firm's current state of incorporation. To avoid stale incorporation data, we scrape historical state of incorporation data from SEC filings dating back to 1994, following Spamann and Wilkinson (2019), and remove all firms changing their states of incorporation. Surprisingly, this affects only one firm in our IV sample.

which the legal innovation occurs. That is, we focus on directors with at least two directorships where the director is exposed to a legal development regarding pill use in one state (State A) to instrument for his or her likelihood of adopting a poison pill at a firm located in a *different* state (State B) that has yet to have a similar legal development. Figure 4 illustrates this instrument. Directors B and C are more likely to become first-time adopters at their firms in Connecticut and Massachusetts, respectively, through their direct exposure to the legal shock in Ohio. Directors E and F also are more likely to become first-time adopters at the firms in Connecticut and Massachusetts, respectively, because of their peer directors' exposure to legal shocks in Ohio. This restriction makes it extremely unlikely that the exclusion criterion is violated. A given director's career prospects on another board in a different state should be uncorrelated with the information shock regarding the poison pill.

A drawback of using this instrument is that most pill-related court decisions and state statutes occurred in the 1980s and 1990s. To get enough variation in the instrument at the director level, we must expand our dataset back to the 1980s. This precludes us from examining vote support because the Voting Analytics data begin in 2003. We also have to use the back-filled BoardEx data, so the director turnover and new directorship measures reflect some survivorship bias among the directors in our sample.<sup>17</sup>

Table 8 reports the results of tests using this legal development instrumental variable. Panel A reports results without director fixed effects and Panel B reports results with director fixed effects. Columns 1 and 3 report the first stage regressions for the turnover and new directorships outcomes, and columns 2 and 4 report the corresponding second stage regressions. The legal innovation instrument is strongly related to the adoption of a poison pill, as the Kleibergen-Paap Wald F-statistics in the first-stage regressions are all above commonly accepted thresholds. In the second-stage regression for director turnover, the coefficient for *Adopting director x post* is 0.198 and significant at the 5% level. In the second-stage regression for new directorships, the coefficient for *Adopting director x post* is -0.586 and significant at the

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<sup>&</sup>lt;sup>17</sup> A second potential concern with this instrument is the takeover regimes in the 1980s and 1990s (e.g., the hostile takeover wave of the 1980s) may have created different labor market incentives and consequences than the current regime, which we study in our main analysis. Table IA.10 in the Internet Appendix reports specifications for director turnover and new directorships over various decades of our sample period.

1% level.<sup>18</sup> When adding director fixed effects in Panel B, the coefficients are 0.116 (p-value = 0.07) and -0.431 (p-value = 0.00) for director turnover and new directorships, respectively. At first glance, the difference in magnitudes between the 2SLS and OLS coefficients raises concerns about a blow-up problem from weak instruments in 2SLS regression (e.g., see Atanasov and Black (2016)).<sup>19</sup> A weak instrument, however, is not a problem in our application, as the Kleibergen-Paap Wald F-statistic in the first-stage regression in Panel B, column (1) is 24. We interpret the higher coefficient estimate as a result of the relatively high sensitivity of a director's turnover or new directorships to arbitrary variation in the director's involvement in poison pill adoption that arises because of exposure to legal innovations regarding the pill. Thus, the 2SLS results indicate that the influence of pill adoption on a director's turnover and new directorships is causal and not the result of selection effects.

## 5. Event study measures of directors' labor market values

In this section we examine an alternative measure of a director's value for a firm, the share price reaction to the announcement of the director's departure from the board. As Fich and Shivdasani (2007) point out, the share price reaction reflects investors' perceptions of an individual director's value to the firm compared to the director's expected replacement. If association with pill adoption lowers a director's value, the director's departure should correspond to a higher share price reaction than when a non-pill-associated director leaves a board.

To test this prediction, we compile departure announcements from the BoardEx Board and Director Announcement database from 2003-2017. This database identifies a total of 12,426 director departures, including 167 announcements of a director's death. Panel A of Table 9 reports that shareholders react positively, on average, to the news that a director is departing the board, as the average abnormal return for

<sup>18</sup> The results are similar if we restrict the sample to legal developments outside of the state of Delaware, which is the location of many important court decisions regarding poison pills.

<sup>&</sup>lt;sup>19</sup> The ratios of our 2SLS coefficients in Panel B of Table 8 to the OLS coefficients in Model (3) of Tables 4 and 5 for director turnover and new directorships are 3.2 and 5.7, respectively. These ratios are considerably lower than Jiang's (2017) reported average (9-18) for affirmative endogeneity IVs used for identification in top-3 finance journals.

the (-1, +1) window is 0.31% and for the (-5, +5) window is 0.57%. This result is similar to previous findings about directors' departures reported by Fich and Shivdasani (2007).

The results in Panel B of Table 9, however, show that the positive share price reaction to a director's departure is concentrated primarily among directors who previously oversaw the adoption of a poison pill. The mean abnormal return for directors associated with poison pill adoptions is 0.96% (p-value less than 0.001), compared to 0.31% (p-value = 0.11) for directors not associated with pill adoption. The difference in mean stock price reactions is statistically significant at the 5% level.

To the extent that a director's association with a poison pill conveys negative information about the director's contribution to firm value, we hypothesize that the effect will dissipate over time. This is because directors offer a broad menu of potential contributions to firm value. For directors who stay in the director labor market, their past association with pill adoption is likely to become less important over time, as their other attributes play an increasing role in determining their values to firms. To investigate this hypothesis, we partition the sample into director departures within three years of adopting a poison pill, or more than three years. The mean stock price reaction is larger for directors who depart their boards within three years of adopting a pill than for directors departing more than three years after pill adoption (1.28% compared to 0.90%). This difference is not statistically significantly in this univariate comparison, but it is significant in the multivariate tests in Panel C.

Panel C of Table 9 reports on the effect of prior pill adoption on the stock price reaction to news of a director's departure in multivariate tests that include controls for firm and director characteristics (as in Tables 3–5) and firm and year fixed effects. Both three-day (-1, +1) and 11-day (-5, +5) cumulative abnormal returns are higher for departing directors who are associated with pill adoption than for directors not associated with pill adoption. The effect is large and statistically significant for director departures within three years of a poison pill adoption. Again, these departures are from all boards on which the director serves, not only the firm that adopted the poison pill. These results imply that directors' values to their firms are discounted by their association with poison pills, particularly if the pill was adopted recently.

Panel D of Table 9 reports on the share price reaction to departures caused by a director's death. Previous research reports mixed results about the share value impact of a director's death. Nguyen and Neilsen (2010), for example, find that the average stock price reaction to the death of an independent director is negative, while Hayes and Schaefer (1999), Salas (2010), and Francassi and Tate (2012) find positive reactions for CEOs, top executives, and connected directors, respectively. In our sample, there is a positive but statistically insignificant average abnormal return for the short-window period surrounding a director's death (0.54%). Partitioning the sample by a director's association with pill adoption, however, reveals a pattern: the average share price reaction is positive for directors who are associated with pill adoptions (2.05%) and negative for other directors. The difference in average share price reaction is significant at the 10% level.

These results suggest that directors who do not adopt a poison pill have relatively high values in the director labor market compared to directors who do. Panel E of Table 9 reports on a crude test of this conjecture, in which we measure the share price reaction for directors who depart a board during the three months before the firm adopts a poison pill. The share price reaction in the 10-day window surrounding the departure announcement is negative and is marginally statistically different from the share price reaction to other directors' departures. The negative abnormal return could reflect firm turmoil in in the months before pill adoption, but this result is consistent with the view that non-pill adopting directors have relatively high values in the director labor market. Overall, the results in Table 9 further support the inference that directors who are associated with the adoption of a poison pill experience a decrease in the market value of their director services.

# 6. Additional evidence on the channels of director consequences

6.a. Heterogeneous effects of pill adoption on the firm

Previous theory and evidence indicates that poison pills have different effects on different firms, and that the impact of a takeover defense on firm value depends on firm-specific characteristics (e.g., see Amihud, Schmid, and Solomon 2019). Takeover defenses tend to be valuable for firms that have important

business relationships with large customers and strategic partners, for firms with founder-CEOs, and firms with high R&D investments; defenses tend to be costly for firms in which managers have low share ownership and for which the value of cash is low.<sup>20</sup> If the director labor market imposes Fama's (1980) ex post settling up, we should expect directors to experience negative consequences especially when the poison pill is costly for the firm.

As a parsimonious way to incorporate the many diverse effects of a pill on firm value, we use Johnson et al.'s (2021) finding that the net benefits of takeover defenses are negatively related to firm age. In particular, the marginal benefits of a takeover defense (including those associated with large customers, strategic partners, and R&D investments) tend to decrease as a firm ages, while the marginal costs (associated with low managerial share ownership and the value of cash) increase. This evidence of a lifecycle effect implies that we can use the pill-adopting firm's age as a proxy for the pill's value to the firm. We therefore repeat our tests and include interaction terms that pick up differences in director outcomes depending on whether the adopting firm is young (up to two years after its IPO), middle-aged (3–9 years after IPO), or relatively old (10+ years after IPO).<sup>21</sup>

Panel A of Table 10 reports the results of these tests. Columns 1 and 2 report on tests for changes in vote support, with and without other control variables, respectively, and including year, industry, and director fixed effects. The coefficients for *Adopting director x post* reflect the effects on first-time pill adopters when the pill-adopting firm is 10+ years old. These coefficients are similar to those reported in Tables 3–5, and show that first-time pill adopting directors at older firms experience decreases in vote support, increases in director turnover, and decreases in new board positions. Among directors serving at young firms (1-2 years old), however, all of these effects are attenuated. These effects are attenuated also for first-time adopters at middle-aged firms (3-9 years), although the coefficients are consistently statistically significant only in Models 1, 2, and 5.

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<sup>&</sup>lt;sup>20</sup> See Johnson et al. (2015, 2021), Cen et al. (2016), Cremers et al. (2016), and Cremers et al. (2019).

<sup>&</sup>lt;sup>21</sup> Adopting firm age is defined as the age of the adopting firm for a director's first poison pill and 0 for all directors who never adopt a poison pill. This allows us to maintain a control group of directors who are not associated with pill adoption.

These results indicate that directors who become associated with poison pill adoption at young firms experience less severe career consequences than directors who adopt pills at older firms. This is consistent with the evidence in Johnson et al. (2021) that pills adopted at young firms tend to add to firm value, while pills adopted at older firms tend to decrease firm value. Panel B of Table 10 examines the effects of pill adoption when we focus on the ages of the firms at which the first-time adopting director serves on the board. In these tests, firm age refers to the age of the firm at which the director serves, not the age of the pill adopting firm. Once again, the coefficient on *Adopting director x post* is negative and statistically significant, indicating that pill-adopting directors who serve at older firms experience a decrease in vote margins, an increase in departure rates, and a decrease in new directorships. The coefficients for the interaction term for young firms (1-2 years old) indicate that the effects for turnover and new directorships are significantly attenuated when the director serves on the boards of young firms. (The coefficients for *Adopting director x post x firm age (1-2)* in the tests for vote support, by comparison, are statistically insignificant.) This implies that first-time pill adopting directors become less valuable in the labor market particularly when they serve at older firms.

Taken together, the results in Panels A and B of Table 10 indicate that first-time poison pill-adopting directors experience the most negative career consequences when the pill is adopted at older firms and when they serve on the boards of older firms. A director's association with poison pill adoption, however, is less penalized in the market for directors at young firms. This is evidence that the director labor market is sensitive to the unique benefits and costs that arise from the match between a director's attributes – in this case, the association with a poison pill – and the particular firm's characteristics.

#### 6.b. Additional tests and extensions

The empirical results presented thus far demonstrate that pill adoption is related to first-time adopting directors' vote margins, turnover, and future director appointments. Directors' consequences are (i) more severe when they serve at mature firms compared to young firms; (ii) not attributable to acute corporate events, such as takeover bids or hedge fund investments, that might motivate a firm to adopt a

- pill, and (iii) not attributable to the firm's prior performance. The Internet Appendix (Tables IA.8 IA.18) tabulates the results of several tests that consider whether these relations are affected by additional characteristics of the pill, the director, or the firm. In brief, the results show the following:
- (i) First-time poison pill adopting directors experience significantly worse labor market consequences than their peer directors at the pill-adopting firms who previously were associated with pill adoption (Internet Appendix Table IA.8, Panel A).
- (ii) First-time pill adopters also experience significantly more negative career consequences compared to other directors with whom they serve on boards at other than the pill-adopting firm (Internet Appendix Table IA.8, Panel B).
- (iii) The results are robust in tests that include firm and firm x year fixed effects. This further indicates that firm-specific and time-varying characteristics do not explain the negative consequences to first-time pill adopters (Internet Appendix Table IA.8, Panel C).
- (iv) The results are robust to alternative ways of clustering the standard errors, including by director and year, firm, and firm and year (Internet Appendix Table IA.9).
- (v) The results arise in each decade of our sample period, including the 1980s, 1990s, 2000s, and 2010s (Internet Appendix Table IA.10). Institutional Shareholders Services, Inc. (ISS) rose to prominence as a proxy vote advisor only during the latter half of this period and began making recommendations about director voting related to poison pills in the 2005 proxy season. So, while ISS recommendations now play an important role in directors' vote support, it is not the primary channel by which first-time pill adopting directors experience higher turnover rates and lower rates of new director appointments.
- (vi) If the pill-adopting firm also has a classified board, the negative effect on directors' vote support and turnover is attenuated (Internet Appendix Table IA.11). A possible explanation is that directors who are up for reelection two or three years after the pill is adopted face smaller consequences than directors who face reelection within a year, consistent with an investor inattention or salience story. Another possibility is that pill adoption conveys relatively little information about the directors of firms that already

have classified boards, perhaps because the pill and classified board convey similar information about the firm's governance and managers' entrenchment.

- (vii) The incremental effects on vote support and turnover of a director's second association with a pill adoption are smaller than for her first pill adoption, but are still statistically significant (Internet Appendix Table IA.12).
- (viii) The likelihood that a first-time adopting director subsequently is appointed to a new board is positively related to the stock price reaction when the pill is adopted. Vote support and turnover likelihood, however, are not significantly related to the share price reaction upon pill adoption (Internet Appendix Table IA.13).
- (ix) Directors' negative career consequences following pill adoption are economically and statistically significant even after excluding hedge fund targets (Internet Appendix Table IA.14).<sup>22</sup>
- (x) First time pill-adopting director turnover likelihood is positively and significantly related to the fraction of the firm's shares that are owned by passive investors. The impact of passive share ownership on vote support and new directorships, however, is not statistically significant (Internet Appendix Table IA.15).
- (xi) Directors experience an increase in vote support when their firms terminate poison pills. The relation between pill termination and director turnover, or new board positions, is statistically insignificant (Internet Appendix Table IA.16).
- (xii) Some pill characteristics are significantly related to vote support, director turnover, and/or new directorships, including whether the pill was voted on by shareholders, whether the pill was adopted to protect tax benefits from a firm's net operating losses, whether the pill has a short sunset provision, whether the pill is "chewable," and whether the pill merely replaces an expiring pill. All of the main results

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<sup>&</sup>lt;sup>22</sup> We thank Alon Brav for an updated version of the Brav et al. (2008) data on hedge fund targets.

in the paper, however, persist in tests that control for these pill characteristics (Internet Appendix Table IA.17).<sup>23</sup>

(xiii) The results are similar when we exclude executive or inside directors from the sample, indicating that the results are not driven by insiders who sit on the board (Internet Appendix Table IA.18).

We interpret these results as indicating that the main driver of directors' negative career consequences is their initial association with an adoption of a poison pill, and that director, pill, and firm characteristics have at most only a secondary influence. We infer that investors and the director labor market learn something unfavorable about directors who first become associated with a pill adoption. The entrenchment hypothesis implies that such directors are viewed as more likely to cater or defer to managers' interests at shareholders' expense, including but not necessarily limited to takeover situations.

## 7. Why do directors adopt poison pills?

The results in Sections 3–8 indicate that directors face negative career consequences for being associated with the adoption of a poison pill. Why, then would directors ever vote for a pill? One possibility is that there are costs of opposing managers who favor a pill. Marshall (2010), for example, finds that directors who openly dissent from a management position lose 85% of all current board seats in the five years after leaving a firm because of their dissent. Levit and Malenko (2016) also show that directors' reputational concerns can motivate them to vote for policies such as poison pills, depending on the specific labor market equilibrium. Consistent with this argument, our results in Table 10 suggest that directors who gain pill-friendly reputations could bolster their values in the market for directors at young firms.

Another possibility is that directors receive financial compensation for supporting poison pills. To consider this possibility, we examine directors' compensation around pill adoption. Employing the BoardEx employment database, we use directors' names to fuzzy match 6,671 unique directors to Execucomp

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<sup>&</sup>lt;sup>23</sup> We thank Ofer Eldar and Michael Wittry for sharing their hand-collected data on poison pill adoptions and characteristics from 1994-2021. These data include significantly better coverage of pill characteristics than commercially available data such as SDC.

compensation data from 2003–2015. Table 11 reports on multivariate DiD tests that isolate first-time pill adopters' total compensation packages in the years around pill adoption. These tests include the same control variables that are used in Tables 3–8, although the results do not appear to be sensitive to any particular set of controls. Further, Figure 5 reports the results from a fully saturated DiD model.

The results in Table 11 indicate that first-time pill adopting directors' overall levels of compensation, are, at best, marginally significantly higher over the whole course of their post-pill adoption careers (e.g., the results in Models 2 and 5 are not statistically significant at conventional levels). Figure 5, however, shows that these directors enjoy short-lived but significant pay increases in the one to two years after the pill is adopted. Their total compensation increases by 15.4% in the year after pill adoption (time t=1). The average director in our sample has a total real annual compensation of \$166,690 (in 2003 dollars), so a 15.4% bump corresponds to an increase of \$25,670 in the adopting directors' compensation package in the year after pill adoption. While this is not a large amount, previous research shows that agents' behavior can be affected by even trivial payments (e.g., Tullock 1990, Rasmusen and Ramseyer 1994).

We cannot make definitive inferences from these results, as the increase in pay could reflect an increase in directors' duties, committee assignments, or meeting attendance immediately after a pill is adopted. Directors' pay is but one aspect of the director labor market equilibrium, which also can reflect the match between director skills and firm needs, the extent to which managers exert influence on board members, and the social pressures inside board rooms. So there probably are many reasons directors adopt pills even in the face of negative longer-term career consequences. But our results suggest that an increase in monetary compensation frequently is one of the reasons.

#### 8. Conclusions

This paper examines the consequences for directors who serve on boards that adopt poison pills. A board member's first-time involvement in the adoption of a poison pill is associated with significantly adverse career consequences. In a multivariate model with director fixed effects and firm controls, the average first-time adopter experiences a decrease in vote support of 3.4 percentage points at all boards on

which she serves – a 4% decrease from the overall sample average vote support of 79%. First-time adopters' likelihood of leaving one of their existing boards in each subsequent year increases by 3.6 percentage points, a 48% increase in exit likelihood over the sample-wide average exit likelihood of 7.5%. Directors' likelihood of being appointed to a new board in an average year after their first involvement with pill adoption decreases by 7.6 percentage points, which nearly equals the 8.2% base probability of a new director appointment in a given year.

Our director-level panel data framework helps to isolate treatment effects that are unique to the director and not driven by omitted firm or director characteristics. This is particularly the case when we include director, year, firm, and industry fixed effects, as well as controls for specific director characteristics such as age and status as CEO or board chair. These specifications greatly reduce the possibility that our results reflect selection effects associated with unobservable time-varying influences on pill adoption and director outcomes due to the individual director, the director's firm, or the firm's industry. The controls for director fixed effects indicate that a director's first-time involvement in the adoption of a poison pill leads to negative career consequences not only in comparison to other directors, but also compared to her own experience before becoming associated with pill adoption.

The results of several tests indicate that directors' consequences are not driven by circumstances that can lead firms to adopt pills. The consequences arise following adoption of clear-day pills as well as pills adopted in the wake of a takeover bid or hedge fund investment. They arise for pills adopted after periods of good performance (sunny day pills) as well as those adopted after periods of poor performance (rainy day pills). The consequences also are apparent in 2SLS tests that use arbitrary variation in a firms' pill adoption through its director's exposure to a legal developments regarding poison pills, either directly or through a linked board.

An alternative measure of a director's labor-market value is the stock price reaction to news that the director leaves a firm's board, or dies. Like previous researchers (e.g. Fich and Shivdasani (2007)), we find that stock prices increase, on average, when a director leaves a board. However, the positive share price reaction appears only in the subset of directors who were associated with a previous adoption of a

poison pill. When directors who were not associated with poison pill adoptions leave the firm, there is no significant stock price reaction. These results provide further evidence that directors who are associated with the adoption of a poison pill are valued less by shareholders compared to other directors.

Recent research shows that takeover defenses such as poison pills are not uniformly value-decreasing for all firms and that the impact on firm value depends on firm-level characteristics that are correlated with firm age (see Johnson et al., 2021). We therefore use firm age as a proxy for the net costs of pill adoption and find that directors' adverse consequences concentrate among first-time adopting directors who serve at seasoned firms and are attenuated for directors at young firms.

Overall, our results strongly indicate that poison pill adoption is not costless for directors of seasoned firms. To the contrary, directors who become associated with the adoption of a poison pill suffer adverse consequences in the director labor market and are judged by investors to be less valuable as board members.

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# **Appendix Table 1: Variable Definitions**

This table reports the definitions of the variables used in our empirical tests. The sample consists of 35,113 unique directors and 5,237 unique firms in the BoardEx Director Employment database over the period of 2003-2015.

Variable	Data source	Definition
Director-specific variables		
Voting for percentage	ISS Voting Analytics data	Director's percentage of votes "for" in an uncontested election divided by the total votes cast
Director turnover	BoardEx Director Employment data	An indicator variable taking the value of one if the director leaves a board
New directorships	BoardEx Director Employment data	An indicator variable taking the value of one if the director joins a new board
Director age (years)	BoardEx Director Employment data	Ages as provided in BoardEx data.
Board tenure (years)	BoardEx Director Employment data	Number of years since the director was originally appointed to the board.
CEO (indicator)	BoardEx Director Employment data	An indicator variable taking the value of one if the director is also CEO of the firm.
Chairman (indicator)	BoardEx Director Employment data	An indicator variable taking a value of one if the director is also chairman of the board.
Non-executive director (indicator)	BoardEx Director Employment data	An indicator variable taking the value of one if the director is a non- executive director for a given firm.
Total number of directorships	BoardEx Director Employment data	The total number of directorships as reported in the BoardEx data.
Director compensation	Execucomp data	Log of total reported compensation, stock grants, and cash fees, respectively.
Firm-specific variables Annual stock return (%)	CRSP	The calendar year stock return for the firm in the prior calendar year.
Board size	BoardEx Director Employment data	The board size as reported in the BoardEx data.
Firm age (years)	COMPUSTAT	The number of years the firm has had a non-zero figure for total assets (at) since the current year.
Institutional ownership (%)	Thomas Reuters Institutional (13f) Holdings data	
Log of book assets	COMPUSTAT	Book value of assets (at) in the prior fiscal year.
Log of market capitalization	COMPUSTAT	Current shares outstanding (csho) in COMPUSTAT times the fiscal year closing price (prcc f) in the prior fiscal year.
ROA (%)	COMPUSTAT	Net income in the prior year divided by total assets in the prior year.
Classified board (indicator)	ISS Governance and Governance Legacy	An indicator variable taking the value of one if the firm has a classified board

# **Appendix Table 2: State by State Legal Developments**

This table reports the year of passage for poison pill state statutes and year of important poison pill court decisions for the legal development exposure instrumental variable used in Table 9. The dates of the state statutes are from Karpoff and Wittry (2018) and the court cases are from Catan and Kahan (2016).

State	Year	Statute or court case citation
CO	1986	Spinner Corp. v. Princeville Dev. Corp., Civ. No. 86-0701, 1986 BL 11, at *1 (D. Haw. Oct. 31, 1986)
	1989	HB 1235
CT	2003	SB 951
	1985	Moran v. Household Int'l, Inc., 500 A.2d 1346, 1354, 1357 (Del. 1985)
DE	1985	Unocal Corp. v. Mesa Petroleum Co., 493 A.2d 946, 955 (Del. 1985)
FL	1989	SB 851
GA	1988	W. Point-Pepperell, Inc. v. Farley Inc., 711 F. Supp. 1088, 1094-95 (N.D. Ga. 1988)
	1988	HB 1272
HI	1988	HB 2961
ID	1988	SB 1448
IL	1989	HB 165
IN	1986	Dynamics Corp. of Am. v. CTS Corp., 637 F. Supp. 406, 407-09 (N.D. III.)
111	1986	HB 1257
IA	1989	SB 502
KY	1988	HB 460
ME	1990	GaPac. Corp. v. Great N. Nekoosa Corp., 728 F. Supp. 807, 809-12 (D. Me. 1990)
IVIE	2002	HB 640
	2002	
MD	1989	Realty Acquisition Corp. v. Prop. Tr. of Am., Civ. No. JH-89-2503, 1989 WL 214477, at *2 (D. Md.
	1999	Oct. 27,1989)
3.64	1000	SB 169
MA	1989	CH 242
MI	1986	Harvard Indus., Inc. v. Tyson, No. 86-CV-74639-DT, 1986 WL 36295, at *1 (E.D. Mich. Nov. 25,
	2001	1986)
		SB 206
MN	1986	Gelco Corp. v. Coniston Partners, 652 F. Supp. 829, 847-48 (D. Minn. 1986)
	1995	HB 399
MS	2005	HB 371
MO	1999	HB 1667
NV	1989	AB 659
NJ	1985	Asarco Inc. v. Court, 611 F. Supp. 468, 477-80 (D.N.J. 1985)
	1989	CH 107
NY	1988	Bank of N.Y. Co. v. Irving Bank Corp., 536 N.Y.S.2d 923, 925-26 (N.Y. Sup. Ct. 1988)
	1988	CH 743
NC	1989	SB 280
OH	1986	HB 902
OR	1989	SB 300
PA	1988	SB 2031
RI	1990	SB 90
SC	1988	SB 451
SD	1990	HB 1289
TN	1989	SB 2042
TX	1989	A. Copeland Enters. v. Guste, 706 F. Supp. 1283, 1289-92 (W.D. Tex. 1989)
	2003	HB 1156
UT	1989	SB 100
VT	2008	HB 888
VA	1989	Topper Acquisition Corp. v. Emhart Corp., Civ. A. No. 89-00110-R, 1989 WL 513034, at *7-8 (E.D.
•		Va. Mar. 23, 1989)
	1990	HB 462
WA	1998	HB 2387
WI	1986	R.D. Smith & Co. v. Preway Inc., 644 F. Supp. 868, 874-75 (W.D. Wis. 1986)
***	1987	SB 1
WY	2009	SB 72
44 1	2009	עט 12

Table 1. Data

This table reports the number of observations of unique directors, firms, and new poison pills each year. The sample consists of 35,113 unique directors in the BoardEx Director Employment database over the period of 2003-2015. We use Securities Data Company (SDC) Poison Pills database to identify firms that adopt a poison pill in any given year.

Year	Unique firms	Unique directors	Firm-director observations	Pills adopted	New first-time adopting directors
Pre-2003	-	-	-	1,732	5,667
2003	3,014	16,559	20,915	74	333
2004	3,095	18,370	22,973	59	264
2005	3,201	19,008	23,899	82	422
2006	3,217	19,140	23,949	94	442
2007	3,164	19,087	23,917	68	305
2008	3,168	19,050	23,874	119	530
2009	3,040	18,463	22,969	107	480
2010	2,884	17,562	21,761	61	254
2011	2,846	17,462	21,629	63	285
2012	2,789	17,270	21,397	51	222
2013	2,733	17,234	21,347	48	215
2014	2,752	17,532	21,909	26	113
2015	2,790	16,257	20,812	27	101
Total (2003-2015)	5,237	35,113	291,351	879	3,966

# **Table 2. Summary statistics**

The sample consists of 35,113 unique directors in the BoardEx Director Employment database over the period of 2003-2015. Variables are defined in Appendix Table 1. Panel A reports director and board characteristics and Panel B reports firm characteristics. We use the Securities Data Company (SDC) Poison Pills database to identify all directors who sit on a board that adopts a poison pill. Data on votes in uncontested director elections is reported in the Institutional Shareholder Services (ISS) Voting Analytics database. Firm characteristic variables are constructed using the Compustat Fundamentals Annual database.

	Obs.	Mean	SD	Min	P25	P50	P75	Max
Panel A: Director and board charact	eristics							
Adopted poison pill	35,113	0.27	0.45	0	0	0	1	1
Voting for percentage	92,285	0.877	0.134	0.396	0.833	0.919	0.974	1.000
Director turnover	291,351	0.075	0.263	0	0	0	0	1
New directorships	291,351	0.082	0.274	0	0	0	0	1
CEO (indicator)	291,351	0.117	0.321	0	0	0	0	1
Chairman (indicator)	291,351	0.118	0.323	0	0	0	0	1
Non-executive director (indicator)	291,351	0.845	0.361	0	1	1	1	1
Board size	38,693	7.89	2.67	1	6	8	9	27
Board member age (years)	291,351	59.88	9.46	24	54	60	66	100
Board tenure (years)	291,351	7.09	6.90	0	2	5	10	61
Total number of directorships	291,351	1.59	0.93	1	1	1	2	11
Panel B: Firm characteristics								
Firm age (years)	38,693	17.66	15.96	1	7	13	23	90
Book assets (\$B)	38,693	4.18	14.03	0.00	0.10	0.43	1.90	117.50
Market capitalization (\$B)	38,693	2.36	5.00	0.00	0.10	0.43	1.76	23.22
ROA (%)	38,693	4.45	24.06	-110.59	2.69	10.35	16.07	40.62
Annual stock return (%)	38,693	16.01	62.86	-85.87	-22.15	7.16	38.76	263.77
Institutional ownership (%)	38,693	56.64	30.34	0.43	30.61	62.70	82.13	100.00

#### **Table 3. Director election voting results**

This table reports the results of difference-in-difference linear regression models analyzing director outcomes around the adoption of a director's first poison pill. The sample consists of 35,113 unique directors in the BoardEx Director Employment database from 2003-2015. The independent variable of interest is the interaction of two indicator variables: *Adopting director*, which equals 1 if a director sits on a board that adopts a poison pill at any point in his or her career, and *post*, which equals 1 for all years following the adoption of a director's first poison pill. *Post* cannot be included in the models due to collinearity with year fixed effects. The treated group includes a director's appointments at the pill adopting firm and at other firms' boards at the time of adoption, but not future appointments after the pill adoption. The dependent variable (*voting for percentage*) is a continuous variable equal to a director's percentage of votes "for" in an uncontested election divided by the total number of votes cast. Data on votes in uncontested director elections is reported in the Institutional Shareholder Services (ISS) Voting Analytics database. We use the Securities Data Company (SDC) Poison Pills database to identify all directors who sit on a board that adopts a poison pill. Director control variables are constructed using the BoardEx Director Employment database and firm control variables are constructed using the Compustat Fundamentals Annual database. Industry fixed effects are constructed using 3-digit SIC codes. Robust standard errors are clustered at the director level. t-statistics are reported in parentheses, and \*\*\*, \*\*, \* denote significance of the parameter estimates at the 0.01, 0.05, and 0.10 levels, respectively.

Dependent variable =	Voting for percentage							
Sependent variable	(1)	(2)	(3)	(4)	(5)			
Adopting director x post	-0.015***	-0.016***	-0.035***	-0.034***	-0.020***			
	(-6.39)	(-7.06)	(-11.55)	(-11.20)	(-7.83)			
Adopting director	-0.021***	-0.027***	()	()	( , , , , ,			
	(-13.82)	(-17.88)						
Director control variables	()	( -,,,,,						
CEO (indicator)		0.007**		0.005	0.007**			
,		(2.18)		(1.38)	(2.26)			
Chairman (indicator)		-0.005**		-0.001	0.000			
,		(-2.36)		(-0.36)	(0.15)			
Non-executive director		( =)		( *** *)	(*****)			
(indicator)		-0.001		0.002	-0.001			
		(-0.27)		(0.69)	(-0.25)			
Director age (10 years)		-0.001*		( )	by director			
g. ( ))		(-1.70)			effects			
Board tenure (10 years)		-0.004***		-0.001	-0.004*			
		(-3.90)		(-0.58)	(-1.74)			
Number of directorships		-0.001		-0.001	0.002**			
т.ш		(-0.89)		(-1.54)	(2.12)			
Firm control variables		( 3.33)		()	(=)			
Board size		0.001***		0.001***	0.001***			
		(4.05)		(3.87)	(3.47)			
Firm age (years)		-0.052***		-0.069***	-0.073***			
2 0 /		(-14.57)		(-11.54)	(-12.29)			
Log of book assets		-0.001		-0.006***	-0.009***			
8		(-1.06)		(-4.99)	(-7.08)			
Log of market cap.		0.016***		0.023***	0.020***			
		(17.29)		(18.94)	(16.57)			
ROA		0.038***		0.015**	-0.004			
		(5.90)		(2.55)	(-0.59)			
Lagged ROA		0.050***		0.009	0.019**			
		(8.28)		(1.36)	(2.46)			
Annual stock return		-0.004***		-0.009***	-0.005***			
		(-4.11)		(-8.97)	(-4.89)			
Lagged annual stock return		0.003***		0.002***	0.002**			
		(2.93)		(2.59)	(2.22)			
Institutional ownership		0.078***		0.030***	0.010**			
•		(21.42)		(6.27)	(2.23)			
ISS supports					0.199***			
					(79.33)			
Year FE	Yes	Yes	Yes	Yes	Yes			
Industry FE	Yes	Yes	Yes	Yes	Yes			
Director FE	No	No	Yes	Yes	Yes			
OI .	00.005	00 207	00.005	00 207	(0.200			
Observations	92,285	92,285	92,285	92,285	68,299			
R-squared	0.230	0.322	0.613	0.625	0.699			

#### Table 4. Director turnover likelihood

This table reports the results of difference-in-difference linear regression models analyzing director outcomes around the adoption of a director's first poison pill. The sample consists of 35,113 unique directors in the BoardEx Director Employment database from 2003-2015. The independent variable of interest is the interaction of two indicator variables: *Adopting director*, which equals 1 if a director sits on a board that adopts a poison pill at any point in his or her career, and *Post*, which equals 1 for all years following the adoption of a director's first poison pill. *Post* cannot be included in the models due to collinearity with year fixed effects. The treated group includes a director's appointments at the pill adopting firm and other firms' boards at the time of adoption, but not future appointments after the pill adoption. The dependent variable (director turnover) is an indicator variables set equal to one in a year in which a director leaves a board. Data used to construct this measure are taken from the BoardEx Director Employment database. We use the Securities Data Company (SDC) Poison Pills database to identify all directors who sit on a board that adopts a poison pill. Director control variables are constructed using the BoardEx Director Employment database and firm control variables are constructed using the Compustat Fundamentals Annual database. Industry fixed effects are constructed using 3-digit SIC codes. Robust standard errors are clustered at the director level. t-statistics are reported in parentheses, and \*\*\*, \*\*, \* denote significance of the parameter estimates at the 0.01, 0.05, and 0.10 levels, respectively.

Dependent variable =	Director turnover							
•	(1)	(2)	(3)	(4)	(5)			
Adopting director x post	0.085***	0.074***	0.044***	0.036***	0.013***			
1 2 1	(65.21)	(48.65)	(12.98)	(10.55)	(3.27)			
Adopting director	-0.071***	-0.071***	,	,	,			
	(-74.62)	(-59.27)						
Director control variables	( , , , ,	( )						
CEO (indicator)		-0.020***		-0.031***	0.001			
(		(-6.42)		(-5.48)	(0.18)			
Chairman (indicator)		-0.023***		-0.048***	0.004			
( ,		(-13.27)		(-14.73)	(1.06)			
Non-executive director		( )		(,	(,			
(indicator)		-0.014***		-0.019***	-0.000			
,		(-5.10)		(-3.25)	(-0.03)			
Director age (10 years)		0.002**			by director			
		(2.28)			effects			
Board tenure (years)		0.002***		0.010***	0.002***			
		(21.52)		(27.73)	(5.18)			
Number of directorships		0.004***		0.028***	0.010***			
		(4.66)		(17.36)	(6.36)			
Firm control variables		()		(17.50)	(0.50)			
Board size		0.016***		0.026***	0.008***			
Doura Sile		(51.58)		(51.23)	(12.39)			
Firm age (years)		-0.056***		-0.047***	-0.013			
1 mm age () emb)		(-15.27)		(-5.48)	(-1.24)			
Log of book assets		0.005***		-0.010***	-0.003			
Log of coon assets		(7.01)		(-7.28)	(-1.59)			
Log of market cap.		-0.020***		-0.028***	-0.009***			
zog of marnet cup.		(-28.38)		(-21.27)	(-4.84)			
ROA		-0.008		0.019***	-0.023**			
110.1		(-1.64)		(3.28)	(-2.24)			
Lagged ROA		-0.025***		-0.016***	0.010			
Zuggen Holl		(-4.93)		(-2.77)	(1.13)			
Annual stock return		0.002*		0.008***	0.003			
1 11111441 510011 1014111		(1.87)		(6.32)	(1.63)			
Lagged annual stock return		-0.001		0.004***	-0.000			
		(-1.17)		(3.26)	(-0.11)			
Institutional ownership		0.015***		0.046***	0.021***			
P		(5.46)		(9.24)	(2.85)			
ISS supports		()		( )	-0.001			
Tr					(-0.50)			
					( /			
Year FE	Yes	Yes	Yes	Yes	Yes			
Industry FE	Yes	Yes	Yes	Yes	Yes			
Director FE	No	No	Yes	Yes	Yes			
Observations	256,059	256,059	256,059	256,059	68,402			
R-squared	0.009	0.033	0.207	0.236	0.282			
•								

# Table 5. The likelihood of new directorships

This table reports the results of difference-in-difference linear regression models analyzing director outcomes around the adoption of a director's first poison pill. The sample consists of 35,113 unique directors in the BoardEx Director Employment database from 2003-2015. The independent variable of interest is the interaction of two indicator variables: *Adopting director*, which equals 1 if a director sits on a board that adopts a poison pill at any point in his or her career, and *Post*, which equals 1 for all years following the adoption of a director's first poison pill. *Post* cannot be included in the models due to collinearity with year fixed effects. The treated group includes all of a director's appointments. The dependent variable (new directorships) is an indicator variable set equal to one in a year in which a director joins a board. Data used to construct this measure are taken from the BoardEx Director Employment database. We use the Securities Data Company (SDC) Poison Pills database to identify all directors who sit on a board that adopts a poison pill. Director control variables are constructed using the BoardEx Director Employment database and firm control variables are constructed using the Compustat Fundamentals Annual database. Industry fixed effects are constructed using 3-digit SIC codes. Robust standard errors are clustered at the director level. t-statistics are reported in parentheses, and \*\*\*, \*\*, \* denote significance of the parameter estimates at the 0.01, 0.05, and 0.10 levels, respectively.

Dependent variable =		Ne	w directorship	os	
	(1)	(2)	(3)	(4)	(5)
Adopting director x post	-0.120***	-0.060***	-0.077***	-0.076***	-0.060***
	(-37.88)	(-21.02)	(-18.35)	(-18.54)	(-8.42)
Adopting director	0.058***	0.041***			
	(17.88)	(15.10)			
Director control variables					
CEO (indicator)		-0.016***		-0.059***	-0.060***
		(-5.61)		(-12.53)	(-7.46)
Chairman (indicator)		-0.018***		-0.022***	-0.009**
		(-11.32)		(-8.15)	(-2.18)
Non-executive director (indicator)		-0.014***		-0.009*	-0.012
		(-5.43)		(-1.94)	(-1.54)
Director age (years)		-0.001***			by director
		(-19.43)			effects
Board tenure (years)		-0.011***		-0.018***	-0.012***
		(-71.88)		(-53.80)	(-26.35)
Number of directorships		-0.004***		-0.006***	0.001
		(-6.70)		(-4.87)	(0.52)
Firm control variables					
Board size		0.013***		0.023***	0.018***
		(46.94)		(50.10)	(21.83)
Firm age (years)		0.045***		0.032***	0.004
		(13.31)		(4.84)	(0.34)
Log of book assets		-0.005***		-0.011***	-0.013***
		(-9.34)		(-9.16)	(-5.78)
Log of market cap.		-0.005***		0.002	-0.001
70.		(-8.47)		(1.59)	(-0.64)
ROA		0.019***		0.016***	0.029**
1, 1,004		(4.16)		(3.14)	(2.31)
Lagged ROA		0.002		0.002	0.007
		(0.49)		(0.46)	(0.58)
Annual stock return		0.003***		0.001	0.005**
T 1 1 1 1		(2.79)		(0.85)	(2.17)
Lagged annual stock return		-0.002*		-0.003**	0.003
To attent and a source to		(-1.66)		(-2.56)	(1.41)
Institutional ownership		0.002		-0.005	-0.007
ICC commonts		(0.80)		(-1.25)	(-0.90) 0.037***
ISS supports					
					(13.88)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes Yes	y es Yes	y es Yes	y es Yes	y es Yes
Director FE	No	No	Yes	Yes	Yes
DIRECTOR FE	110	INO	1 68	168	1 68
Observations	291,351	291,351	291,351	291,351	80,011
R-squared	0.020	0.114	0.197	0.250	0.288
ix-squareu	0.020	0.114	0.17/	0.230	0.400

# Table 6. Director outcomes at the pill-adopting firm and other directorships

This table reports the results of difference-in-difference linear regression models analyzing director outcomes around the adoption of a director's first poison pill by splitting a director's appointments into three categories: (a) the pill adopting firm itself, (b) other current board appointments at the time of adoption, and (c) all future board appointments. The sample consists of 35,113 unique directors in the BoardEx Director Employment database from 2003-2015. The independent variable of interest is the interaction of two indicator variables: Adopting director, which equals 1 if a director sits on a board that adopts a poison pill at any point in his or her career, and Post, which equals 1 for all years following the adoption of a director's first poison pill. Post cannot be included in the models due to collinearity with year fixed effects. The dependent variable (voting for percentage) in models (1) through (3) is a continuous variable equal to a director's percentage of votes "for" in an uncontested election divided by the total number of votes cast. Data on votes in uncontested director elections is reported in the Institutional Shareholder Services (ISS) Voting Analytics database. Director turnover (models (4) through (6)) is an indicator variable set equal to one in a year in which a director leaves a board. Data used to construct this measure are taken from the BoardEx Director Employment database. We use Securities Data Company (SDC) Poison Pills database to identify all directors who sit on a board that adopts a poison pill. Director control variables are constructed using the BoardEx Director Employment database and firm control variables are constructed using the Compustat Fundamentals Annual database. Industry fixed effects are constructed using 3-digit SIC codes. Robust standard errors are clustered at the director level. t-statistics are reported in parentheses, and \*\*\*, \*\*, \* denote

significance of the parameter estimates at the 0.01, 0.05, and 0.10 levels, respectively

significance of the parameter es	timates at the 0.01	, 0.05, and 0.10 le	vels, respectively	<i>'</i> .		
Dependent variable =	V	oting for percenta	ige		Director turnover	r
	(1)	(2)	(3)	(4)	(5)	(6)
	Pill adopting	Other current	Future	Pill adopting	Other current	Future
Treated sample =	firm	appointments	directorships	firm	appointments	directorships
Adopting director x post	-0.057*** (a)	-0.025*** (b)	0.006	0.055*** (c)	0.024*** (d)	-0.179***
1 0 1	(-9.06)	(-7.43)	(0.46)	(9.26)	(5.74)	(-7.90)
Director control variables	,	,	,	,	,	,
CEO (indicator)	0.004	0.003	0.003	-0.030***	-0.029***	-0.028***
( " ' " ' " ' ' ' ' ' ' ' ' ' ' ' ' ' '	(0.94)	(0.68)	(0.76)	(-5.12)	(-4.76)	(-4.50)
Chairman (indicator)	-0.002	-0.000	-0.004	-0.049***	-0.046***	-0.048***
,	(-0.61)	(-0.09)	(-1.57)	(-13.40)	(-12.81)	(-13.72)
Non-executive (indicator)	0.003	0.002	0.001	-0.012**	-0.021***	-0.022***
	(0.88)	(0.59)	(0.16)	(-1.97)	(-3.29)	(-3.39)
Director age (10 years)	(****)	` /	, ,	` /	` /	(0.07)
			Subsumed by dire	ector fixed effects	S	
Board tenure (10 years)	0.001	-0.002	-0.001	0.126***	0.113***	0.118***
Boura tenure (10 years)	(0.46)	(-0.72)	(-0.32)	(28.18)	(28.25)	(30.71)
Number of directorships	0.001	-0.003***	-0.001	0.028***	0.029***	0.030***
ramoer of uncetorships	(0.65)	(-2.73)	(-0.88)	(14.53)	(16.79)	(17.45)
Firm control variables	(0.03)	(2.73)	( 0.00)	(11.55)	(10.77)	(17.15)
Board size	0.002***	0.001***	0.002***	0.027***	0.025***	0.025***
Bourd Size	(4.62)	(4.03)	(5.43)	(46.51)	(45.33)	(45.27)
Firm age (years)	-0.076***	-0.072***	-0.069***	-0.056***	-0.048***	-0.049***
i iiii uge (yeuis)	(-11.03)	(-12.07)	(-11.67)	(-5.47)	(-5.30)	(-5.67)
Log of book assets	-0.007***	-0.008***	-0.008***	-0.011***	-0.009***	-0.008***
Eog of book assets	(-4.73)	(-5.59)	(-6.01)	(-6.55)	(-6.00)	(-5.56)
Log of market cap.	0.023***	0.023***	0.023***	-0.028***	-0.027***	-0.027***
Log of market cap.	(17.28)	(17.80)	(18.09)	(-19.51)	(-19.64)	(-19.64)
ROA	0.018***	0.017**	0.018***	0.019***	0.008	0.007
KOA	(2.73)	(2.51)	(2.91)	(3.13)	(1.32)	(1.14)
Lagged ROA	0.007	0.016**	0.014**	-0.018***	-0.016**	-0.008
Lagged ROA	(0.98)	(2.10)	(2.01)	(-2.88)	(-2.50)	(-1.32)
Annual stock return	-0.008***	-0.010***	-0.008***	0.008***	0.007***	0.006***
Allitual Stock Tetulii	(-7.08)	(-9.06)	(-7.58)	(5.72)	(5.00)	
Lagged annual stock return	0.003***	0.001	0.002**	0.004***	0.004***	(4.51) 0.004***
Lagged annual stock feturn		(1.09)	(2.26)		(3.54)	(2.93)
Institutional ownership	(3.20) 0.025***	0.032***	0.033***	(3.75) 0.046***	0.049***	0.045***
mstitutional ownership	(4.96)	(6.43)	(6.92)	(8.34)	(9.26)	(8.53)
	(4.90)	(0.43)	(0.92)	(8.34)	(9.20)	(8.33)
F-stat of difference (a) – (b)		17.35***				
(p-value)		(0.00)				
F-stat of difference (c) – (d)		(0.00)			17.68***	
(p-value)					(0.00)	
(p-value)					(0.00)	
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Director FE	Yes	Yes	Yes	Yes	Yes	Yes
Director FE	1 03	105	1 03	105	1 65	105
Observations	76,037	79,033	76,907	217,657	216,939	213,472
R-squared	0.649	0.639	0.646	0.247	0.236	0.232
1. 5400100	0.017	0.057	0.010	0.217	0.250	0.232

#### Table 7. Director outcomes for "clear day", "sunny day", and "rainy day" poison pills

This table reports the results of difference-in-difference linear regression models analyzing director outcomes around the adoption of a director's first poison pill. Panel A examines "clear day" pills, which are pills with no identifiable acute event driving the adoption, compared to all other pills. Panel B examines pills adopted when the firm has above median value and performance in the two years preceding the adoption ("sunny day pills") versus pills adopted following below median value and performance in the two preceding years ("rainy day pills"). The sample consists of 35,113 unique directors from the BoardEx Director Employment database from 2003-2015. The independent variable of interest is the interaction of two indicator variables: *Adopting director*, which equals 1 if a director sits on a board that adopts a poison pill at any point in his or her career, and *Post*, which equals 1 for all years after the adoption of a director's first poison pill. *Post* cannot be included in the models due to collinearity with year fixed effects. The treated group for the vote margin and turnover dependent variables includes a director's appointments at the pill adoption. *Voting for percentage* is a continuous variable equal to a director's percentage of votes "for" in an uncontested election divided by the total number of votes cast. Data on votes in uncontested director elections is reported in the Institutional Shareholder Services (ISS) Voting Analytics database. New directorships and director turnover are indicator variables set equal to one in a year in which a director receives a new appointment to a board and a year in which the director leaves a board, respectively. Data used to construct these measures are taken from the BoardEx Director Employment database. We use the Securities Data Company (SDC) Poison Pills database and data from Catan (2019) to identify all directors who sit on a board that adopts a poison pill. Each model includes all of the director and firm control variables are constructed usi

Dependent variable =	Voting for	percentage	Director	turnover	New directorships	
	(1)	(2)	(3)	(4)	(5)	(6)
Adopting director x post (all other)	-0.041***	-0.039***	0.042***	0.030***	-0.061***	-0.060***
	(-10.98)	(-10.61)	(10.52)	(7.39)	(-11.32)	(-11.59)
Adopting director x post (clear-day)	-0.034*	-0.036*	0.057***	0.041**	-0.050**	-0.068***
	(-1.81)	(-1.88)	(2.81)	(2.12)	(-2.11)	(-3.02)
F-stat of difference (all other – clear-day)	0.12	0.02	0.51	0.31	0.20	0.10
(p-value)	(0.73)	(0.89)	(0.47)	(0.58)	(0.65)	(0.75)
Control variables	No	Yes	No	Yes	No	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Director FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	53,178	53,178	161,468	161,468	173,752	173,752
R-squared	0.608	0.617	0.229	0.260	0.214	0.292

Panel B: "Sunny day" vs. "rainy day"  Dependent variable =	•	ting for percent	age		Turnover		Ŋ	New directorship	os
Performance or value measure =	(1) Stock return	(2) ROA	(3) Tobin's Q	(4) Stock return	(5) ROA	(6) Tobin's Q	(7) Stock return	(8) ROA	(9) Tobin's Q
Adopting director x post (sunny)	-0.038***	-0.056***	-0.044***	0.028***	0.040***	0.042***	-0.075***	-0.074***	-0.073***
	(-5.08)	(-7.44)	(-5.81)	(3.04)	(4.38)	(4.85)	(-9.23)	(-9.32)	(-10.09)
Adopting director x post (rainy)	-0.033***	-0.031***	-0.032***	0.037***	0.035***	0.035***	-0.076***	-0.076***	-0.076***
	(-10.60)	(-9.83)	(-10.29)	(10.42)	(10.05)	(9.87)	(-18.28)	(-18.25)	(-18.16)
F-stat of difference (sunny - rainy)	0.43	10.60***	2.11	0.88	0.25	0.67	0.02	0.11	0.19
(p-value)	(0.51)	(0.00)	(0.15)	(0.35)	(0.61)	(0.41)	(0.88)	(0.74)	(0.66)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Director FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	92,285	92,285	92,285	256,059	256,059	256,059	291,351	291,351	291,351
R-squared	0.625	0.625	0.625	0.236	0.236	0.236	0.250	0.250	0.250

# Table 8. Legal development exposure 2SLS results describing director outcomes

This table reports the results of two stage least squares linear regression models using instrumental variables based on a director's connection to a director who sits on a board incorporated in a state in which a significant court case regarding a poison pill was decided or the state passed a poison pill endorsement law. The sample period is 1980-2015. Panel A displays results without director fixed effects while Panel B includes director fixed effects. The independent variable of interest is the interaction of two indicator variables: Adopting director, which equals 1 if a director sits on a board that adopts a poison pill at any point in his or her career, and Post, which equals 1 for all years following the adoption of the director's first poison pill. The treated group for the vote margin and turnover dependent variables includes a director's appointments at the pill adopting firm and at other firms' boards at the time of adoption, but not future appointments started after the pill adoption. Post cannot be included in the models due to collinearity with year fixed effects. New directorships and director turnover are indicator variables set equal to one in a year in which a director receives a new appointment to a board and a year in which the director leaves a board, respectively. We use the Securities Data Company (SDC) Poison Pills database to identify all firms that adopt a poison pill. Each model includes all of the director and firm control variables used in our main regressions in Tables 3 through 5. Director control variables are constructed using the BoardEx Director Employment database and firm control variables are constructed using the Compustat Fundamentals Annual database. Industry fixed effects are constructed using 3-digit SIC codes. Robust standard errors are clustered at the director level. t-statistics are reported in parentheses, and \*\*\*, \*\*, \* denote significance of the parameter estimates at the 0.01, 0.05, and 0.10 levels, respectively.

	1st stage	2 <sup>nd</sup> stage	1st stage	2 <sup>nd</sup> stage
	(1)	(2)	(3)	(4)
5	Adopt pill	Director	Adopt pill	New
Dependent variable =		turnover		directorships
Panel A: No director fixed effects				
Instrumental Variables				
Pill legal development exposure	0.082***		0.135***	
	(2.97)		(5.97)	
Variables of Interest				
Adopting director x post		0.198**		-0.586***
		(2.02)		(-4.80)
Kleibergen-Paap Wald F-stat	8.8		35.7	
Control variables	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Director FE	No	No	No	No
Observations	46,275	46,275	49,799	49,799
Panel B: Director fixed effects				
Instrumental Variables				
Pill legal development exposure	0.172***		0.162***	
	(4.93)		(5.04)	
Variables of Interest				
Adopting director x post		0.116*		-0.431***
		(1.81)		(-2.69)
Kleibergen-Paap Wald F-stat	24.3		25.4	
Control variables	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Director FE	Yes	Yes	Yes	Yes
Observations	45,455	45,455	48,937	48,937

#### Table 9: Cumulative abnormal returns around the announcement that a director is departing the board

This table reports mean and median values of the abnormal stock price reaction when a board member's departure is announced. The full sample consists of 12,426 announcements of directors leaving boards reported in the BoardEx Announcements database from 2003 through 2017. We use the Securities Data Company (SDC) Poison Pills database to identify all directors who had previously held an appointment on a board that adopted a poison pill. Panel A reports the results from the baseline event study. Panel B analyzes the differential share value impact for departing directors who have previously adopted a poison pill. Panel C analyzes the differential share value impact for departing directors who have previously adopted a poison pill in multivariate regressions, and examines if the result is stronger for more recent first time adopters. Panel D repeats the analysis in Panel B for only announcements of board member deaths. Finally, Panel E repeats the analysis for directors departing just before (within 90 days) a firm's pill adoption. Cumulative abnormal returns are calculated using a one factor market model with parameters estimated from day -250 through day -50 relative to the departure announcement. In Panel C, models (3), (4), (7) and (8) include all of the director and firm control variables used in our main regressions in Tables 3 through 5. Director control variables are constructed using the BoardEx Director Employment database and firm control variables are constructed using the Compustat Fundamentals Annual database. Robust standard errors are clustered at the firm level in Panel D. t-statistics are reported in parentheses, and \*\*\*, \*\*, \* denote significance of the parameter estimates at the 0.01, 0.05, and 0.10 levels, respectively.

Panel A: Abnormal returns in event window around announcement of departing director (N = 12,426)

Event window	Mean	Median	t-Test	Mann-Whitney U-statistic
-1	0.07%	0.00%	1.84*	0.00
			(0.07)	(1.00)
0	0.18%	0.00%	2.09**	0.00
			(0.04)	(1.00)
+1	0.06%	0.00%	1.48	0.00
			(0.14)	(1.00)
-1 to 1	0.31%	0.07%	2.94***	1.95*
			(0.00)	(0.05)
-5 to 5	0.57%	0.38%	3.80***	5.59***
			(0.00)	(0.00)

Panel B: Abnormal returns for departing directors by the prior adoption of a poison pill (N = 12,426)

	Director dep	arture announcement da	ate CAR (-5,5)
Prior pill adoption status for departing director	N	Mean	Median
No prior pill adoption (a)	7,543	0.31%	0.08%
Prior pill adoption (b)	4,888	0.96%	0.79%
Test of difference (b-a) t-statistic (mean) and Mann-Whitney U-statistic (median)		2.17**	4.53***
(p-value)		(0.03)	(0.00)
Prior pill in last 3 years (c)	733	1.28%	0.52%
Prior pill greater than 3 years ago (d)	4,155	0.90%	0.81%
Test of difference (b-a) t-statistic (mean) and			
Mann-Whitney U-statistic (median)		0.61	-0.81
(p-value)		(0.54)	(0.42)

Table 9, continued

Panel C: Multivariate regressions								
		CAR	(-1,1)			CAR (	-5,5)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Prior pill adoption	0.005*		0.004		0.007*		0.004	
	(1.76)		(1.25)		(1.95)		(1.25)	
Prior pill in last 3 years (a)		0.014**		0.013**		0.018**		0.015*
- · · · · · · · · · · · · · · · · · · ·		(2.43)		(2.27)		(2.38)		(2.01)
Prior pill greater than 3 years ago (b)		0.004		0.002		0.006		0.003
(6)		(1.22)		(0.61)		(1.45)		(0.64)
		(1.22)		(0.01)		(1.43)		(0.04)
Control variables	No	No	Yes	Yes	No	No	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Test of difference (a-b) F-stat		3.22*		3.60*		2.65		2.63
(p-value)		(0.07)		(0.06)		(0.10)		(0.10)
Observations	11,526	11,526	11,330	11,330	11,526	11,526	11,330	11,33
R-squared	0.378	0.378	0.387	0.388	0.370	0.370	0.387	0.389
Panel D: Abnormal returns for the	death of dire	ectors (N = 1)	167)					
				Director de	ath announc	ement date (	CAR (-5,5)	
Prior pill adoption status for depart	ing director			N	Mean			lian
All (p-value)			1	67	0.54%	(0.47)	-0.59%	(0.33)
No prior pill adoption (a)			Ģ	95	-0.6	0%	-1.3	5%
Prior pill adoption (b)			7	72	2.03	5%	0.50	6%
Test of difference (b-a) t-statistic (r Mann-Whitney U-statistic (median					1.7	<b>5</b> *	1.9	6*
(p-value)	,				(0.0		(0.0	
Panel E: Abnormal returns for dep	arting direct	ors with no	prior pill (7	(543)	(0.0	76)	(0.0	)3)
=		<u> </u>	*		arture annou	ncement date	e CAR (-5,5	5)
Timing of departing director		•	-	N	Me	an	Med	lian
All (p-value)			7,	543	0.3	1%	0.03	8%
Departure not just before pill (a)			7,	513	0.33	3%	0.09	9%
Departure just prior to the pill (b)			3	30	-4.5	3%	-3.1	2%
Test of difference (b-a) t-statistic (r Mann-Whitney U-statistic (median					-1.:	59	-1.9	6**
(p-value)	,				(0.1		(0.0	

# Table 10. Director outcomes for young vs. seasoned firms

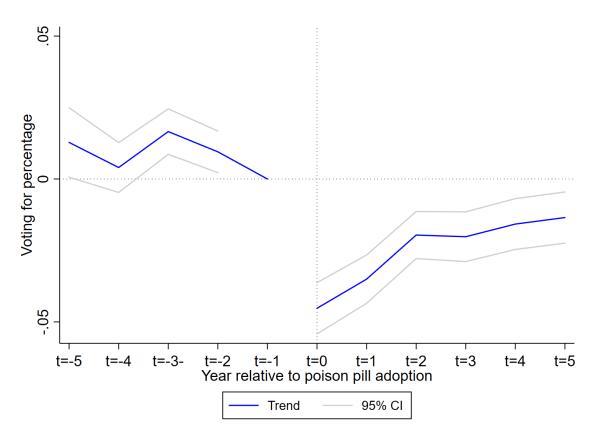
This table reports the results of difference-in-difference linear regression models analyzing director outcomes around the adoption of a firm's first poison pill for different firm age cohorts. Firm age in these tests serves as a proxy for the net costs of adopting a pill. The sample consists of 35,113 unique directors in the BoardEx Director Employment database from 2003-2015. The independent variable of interest is the interaction of two indicator variables: Adopting director, which equals 1 if a director sits on a board that adopts a poison pill at any point in his or her career, and Post, which equals 1 for all years following the adoption of a director's first poison pill. The treated group for the vote margin and turnover dependent variables includes a director's appointments at the pill adopting firm and at other firms' boards at the time of adoption, but not future appointments started after the pill adoption. Post cannot be included in the models due to collinearity with year fixed effects. Voting for percentage is a continuous variable equal to a director's percentage of votes "for" in an uncontested election divided by the total number of votes cast. Data on votes in uncontested director elections is reported in the Institutional Shareholder Services (ISS) Voting Analytics database. New directorships and director turnover are indicator variables set equal to one in a year in which a director receives a new appointment to a board and a year in which the director leaves a board, respectively. We use the Securities Data Company (SDC) Poison Pills database to identify all firms that adopt poison pills. Each model includes all of the director and firm control variables used in our main regressions in Tables 3 through 5. Director control variables are constructed using the BoardEx Director Employment database and firm control variables are constructed using the Compustat Fundamentals Annual database. Industry fixed effects are constructed using 3-digit SIC codes. In panel A, the additional cross terms from the triple interactions are not included in the models due to collinearity with director fixed effects, while in Panel B, the additional cross terms are included in the models but are not reported for brevity. Robust standard errors are clustered at the director level. t-statistics are reported in parentheses, and \*\*\*, \*\*, \* denote significance of the parameter estimates at the 0.01, 0.05, and 0.10 levels, respectively.

Dependent variable =	Voting for	Voting for percentage		Turnover		New directorships	
	(1)	(2)	(3)	(4)	(5)	(6)	
	Pan	el A: By age of ti	he pill-adopting f	firm			
Adopting director x Post	-0.050***	-0.047***	0.054***	0.041***	-0.059***	-0.054***	
	(-7.61)	(-7.41)	(7.72)	(6.06)	(-7.71)	(-7.20)	
Firm age effects							
Adopting director x Post x	0.017**	0.016**	-0.021**	-0.011	-0.041***	-0.045***	
Adopting firm age (1-2)	(2.29)	(2.24)	(-2.54)	(-1.41)	(-4.24)	(-4.78)	
Adopting director x Post x	0.025***	0.023**	0.006	0.003	0.018*	0.009	
Adopting firm age (3-9)	(2.58)	(2.41)	(0.57)	(0.26)	(1.66)	(0.81)	
Control variables	No	Yes	No	Yes	No	Yes	
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	
Director FE	Yes	Yes	Yes	Yes	Yes	Yes	
Observations	92,285	92,285	256,059	256,059	291,351	291,351	
R-squared	0.614	0.625	0.207	0.236	0.198	0.250	
Panel	B: By age of other	non-adopting fir	ms at which the p	oill-adopting dire	ctor sits		
Adopting director x post	-0.036***	-0.034***	0.048***	0.040***	-0.088***	-0.072***	
	(-10.57)	(-10.21)	(12.26)	(10.06)	(-17.08)	(-14.49)	
Firm age effects							
Adopting director x post x	0.003	0.005	-0.034***	-0.032***	0.054***	-0.019	
firm age (1-2)	(0.26)	(0.41)	(-3.27)	(-3.04)	(4.26)	(-1.58)	
Adopting director x post x	0.001	0.001	0.001	0.002	0.012*	-0.028***	
firm age (3-9)	(0.14)	(0.13)	(0.11)	(0.41)	(1.65)	(-4.16)	
Control variables	No	Yes	No	Yes	No	Yes	
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	
Director FE	Yes	Yes	Yes	Yes	Yes	Yes	
Observations	92,285	92,285	256,059	256,059	291,351	291,351	
R-squared	0.614	0.625	0.209	0.238	0.199	0.251	

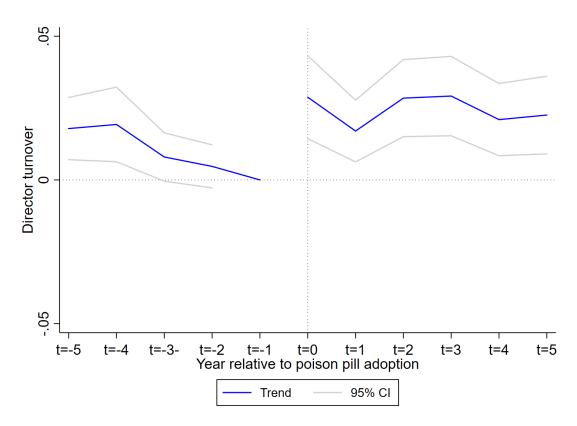
# **Table 11. Director compensation**

This table reports the results of difference-in-difference linear regression models analyzing director compensation around the adoption of a director's first poison pill. The sample consists of 6,671 unique directors in the BoardEx Director Employment database from 2003-2015 who we are able to fuzzy match to the compensation data. The independent variable of interest is the interaction of two indicator variables: *Adopting director*, which equals 1 if a director sits on a board that adopts a poison pill at any point in his or her career, and *Post*, which equals 1 for all years following the adoption of a director's first poison pill. *Post* cannot be included in the models due to collinearity with year fixed effects. The treated group includes a director's appointment at the pill adopting firm, but not at other current appointments at the time of adoption or future appointments started after the adoption of the pill. The dependent variable is equal to the log of a director's total reported compensation. Data on director compensation is from the Execucomp compensation database. We use Securities Data Company (SDC) Poison Pills database to identify all directors who sit on a board that through 5. Director control variables are constructed using the BoardEx Director Employment database and firm control variables are constructed using the Compustat Fundamentals Annual database. Industry fixed effects are constructed using 3-digit SIC codes. Robust standard errors are clustered at the director level. t-statistics are reported in parentheses, and \*\*\*, \*\*, \* denote significance of the parameter estimates at the 0.01, 0.05, and 0.10 levels, respectively.

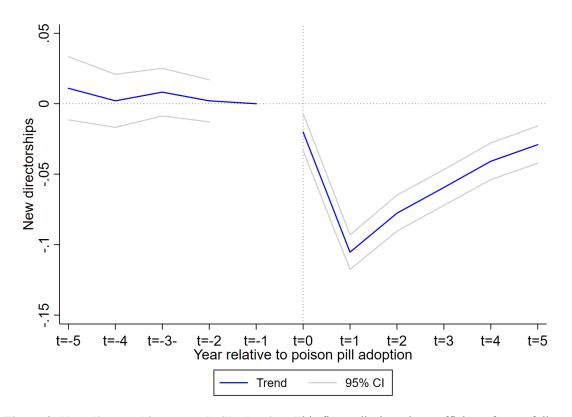
Dependent variable =	log(Total Compensation)						
· ·	(1)	(2)	(3)	(4)	(5)		
Adopting director x post	0.151***	0.025	0.070**	0.050*	0.051		
	(4.56)	(0.92)	(2.28)	(1.72)	(1.60)		
Adopting director	-0.071**	0.020	, ,	, ,	, ,		
1 0	(-2.17)	(0.75)					
Director control variables	, ,	. ,					
CEO (indicator)		-0.012		-0.114	-0.176		
( )		(-0.12)		(-1.19)	(-1.21)		
Chairman (indicator)		0.379***		0.335***	0.310***		
( ,		(19.14)		(15.91)	(11.03)		
Non-executive director		( )		( )	(,		
(indicator)		-0.953***		-0.409*	-0.633**		
()		(-4.25)		(-1.87)	(-2.21)		
Director age (10 years)		0.015***			by director		
Encotor ago (10 yours)		(3.26)			effects		
Board tenure (10 years)		0.004***		0.014***	0.010***		
Bound tenure (10 ) eurs)		(5.36)		(8.24)	(4.32)		
Number of directorships		0.016***		0.009*	0.011*		
rumber of uncetorships		(4.12)		(1.66)	(1.80)		
Firm control variables		(1.12)		(1.00)	(1.00)		
Board size		-0.018***		-0.018***	-0.010***		
Board Size		(-10.10)		(-9.89)	(-4.65)		
Firm age (years)		-0.043**		-0.125***	-0.081		
Tim age (years)		(-2.16)		(-3.39)	(-1.61)		
Log of book assets		0.102***		0.095***	0.085***		
Log of book assets		(17.86)		(11.69)	(7.57)		
Log of market cap.		0.111***		0.068***	0.069***		
Log of market cap.		(19.10)		(9.53)			
ROA		-0.140***		-0.029	(7.43) -0.047		
KOA				(-0.84)	(-0.83)		
Lagged BOA		(-4.07) -0.127***		0.085**	0.099*		
Lagged ROA							
Annual stock return		(-3.45) -0.049***		(2.19) -0.036***	(1.73) -0.043***		
Annual Stock return							
I accord annual atools noturn		(-8.61)		(-6.21)	(-5.98) 0.019***		
Lagged annual stock return		0.007		0.009**			
T4:4-4:11:		(1.30)		(1.99) 0.112***	(2.93)		
Institutional ownership		0.293***			0.185***		
IGG 4		(12.35)		(4.35)	(5.54)		
ISS supports					-0.022**		
					(-2.06)		
V FF	v	37	37	37	37		
Year FE	Yes	Yes	Yes	Yes	Yes		
Industry FE	Yes	Yes	Yes	Yes	Yes		
Director FE	No	No	Yes	Yes	Yes		
01	42.000	42.000	42.000	42.000	21.072		
Observations	43,988	43,988	43,988	43,988	21,872		
R-squared	0.227	0.475	0.701	0.726	0.805		



**Figure 1: Vote support around pill adoption.** This figure displays the coefficients from a fully saturated DiD model from year t=-5 to year t=+5 (Baker et al. 2021) in which the outcome variable is our measure of vote support. In particular, *Voting for percentage* is a continuous variable equal to a director's percentage of votes "for" in an uncontested election divided by the total number of votes cast. We omit all observations before year t-5 and after year t+5. The sample consists of 15,037 unique pill-adopting directors in the BoardEx Director Employment database from 2003-2015. This model incorporates the same fixed effects and control variables as Model 4 in Table 3. Data on votes in uncontested director elections are reported in the Institutional Shareholder Services (ISS) Voting Analytics database. We use the Securities Data Company (SDC) Poison Pills database to identify all directors who sit on a board that adopts a poison pill. Director control variables are constructed using the BoardEx Director Employment database and firm control variables are constructed using the Compustat Fundamentals Annual database. Industry fixed effects are constructed using 3-digit SIC codes. Robust standard errors are clustered at the director level. The gray lines depict the 95% confidence interval.

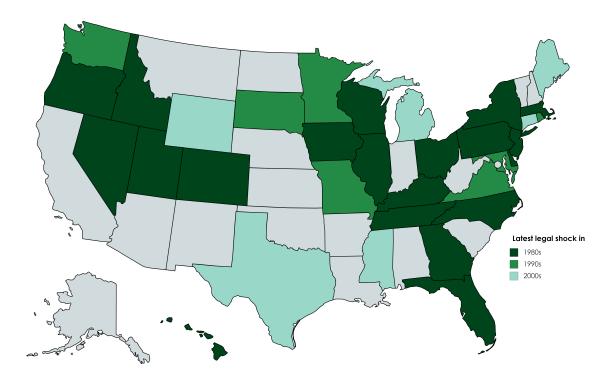


**Figure 2: Director turnover around pill adoption.** This figure displays the coefficients from a fully saturated DiD model from year t=-5 to year t=+5 (Baker et al. 2021) in which the outcome variable is director turnover. In particular, *Director turnover* is an indicator variable set equal to one in a year in which a director leaves a board. Data used to construct this measure are taken from the BoardEx Director Employment database. We omit all observations before year t-5 and after year t+5. The sample consists of 31,845 unique pill-adopting directors in the BoardEx Director Employment database from 2003-2015. This model incorporates the same fixed effects and control variables as Model (4) in Table 4. Data on votes in uncontested director elections is reported in the Institutional Shareholder Services (ISS) Voting Analytics database. We use the Securities Data Company (SDC) Poison Pills database to identify all directors who sit on a board that adopts a poison pill. Director control variables are constructed using the BoardEx Director Employment database and firm control variables are constructed using the Compustat Fundamentals Annual database. Industry fixed effects are constructed using 3-digit SIC codes. Robust standard errors are clustered at the director level. The gray lines depict the 95% confidence interval.

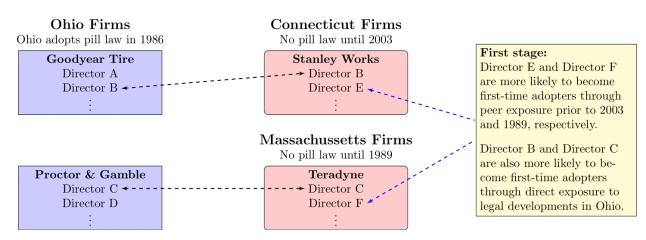


**Figure 3:** New directorships around pill adoption. This figure displays the coefficients from a fully saturated DiD model from year t=-5 to year t=+5 (Baker et al. 2021) in which the outcome variable is new directorships. In particular, *New directorships* is an indicator variable set equal to one in a year in which a director joins a board. Data used to construct this measure are taken from the BoardEx Director Employment database. We omit all observations before year t-5 and after year t+5. The sample consists of 32,126 unique pill-adopting directors in the BoardEx Director Employment database from 2003-2015. This model incorporates the same fixed effects and control variables as Model (4) in Table 5. Data on votes in uncontested director elections are reported in the Institutional Shareholder Services (ISS) Voting Analytics database. We use the Securities Data Company (SDC) Poison Pills database to identify all directors who sit on a board that adopts a poison pill. Director control variables are constructed using the BoardEx Director Employment database and firm control variables are constructed using the Compustat Fundamentals Annual database. Industry fixed effects are constructed using 3-digit SIC codes. Robust standard errors are clustered at the director level. The gray lines depict the 95% confidence interval.

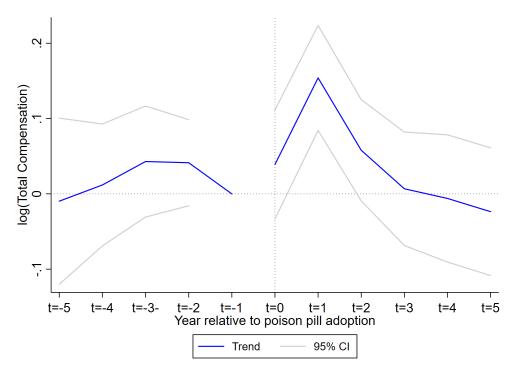




#### Panel B



**Figure 4: Illustration of the instrumental variable based on staggered exposures to legal developments affecting poison pills.** Panel A illustrates the staggered process by which firms incorporated in different states were exposed to court decisions and state poison pill laws that provided legal sanction for the use of poison pills. The specific court decisions and state poison pill laws are listed in Appendix Table 2. Panel B illustrates how we use these staggered exposures to create instruments, using Ohio's adoption of a poison pill law in 1986. Directors B and C have multiple board seats in different industries through time. For example, Director C sits on Goodyear's board from 1981 through 1998 and on Stanley Works' board from 1980 through 1996. The connection between Goodyear Tire and Stanley Works, via Director B, increases the likelihood that Stanley Works will adopt a poison pill and Director E will become a first-time adopter during the years 1986-1996 (the end date is when Director E leaves the board or Connecticut has its own legal development, such as when it passed a poison pill statute in 2003). Likewise, the connection between Proctor & Gamble and Teradyne, via Director C, increases the likelihood that Director F will become a first-time adopter. Additionally, both Director B and Director C are more likely to become first-time adopters at Stanley Works and Teradyne, respectively, through their direct exposure to the legal development regarding the pill in Ohio.



**Figure 5: Total director compensation around pill adoption.** This figure displays the coefficients from a fully saturated DiD model from year t=-5 to year t=+5 (Baker et al. 2021) in which the outcome variable is the log of directors' total compensation package. In particular, log(Total compensation) is a continuous variable equal to the natural log of total compensation reported to the SEC in a given year. Data used to construct this measure are taken from the Execucomp database. We omit all observations before year t-5 and after year t+5. The sample consists of 5,873 unique pill-adopting directors in the BoardEx Director Employment database from 2003-2015. This model incorporates the same fixed effects and control variables as Model 4 in Table 11. Data on votes in uncontested director elections are reported in the Institutional Shareholder Services (ISS) Voting Analytics database. We use the Securities Data Company (SDC) Poison Pills database to identify all directors who sit on a board that adopts a poison pill. Director control variables are constructed using the BoardEx Director Employment database and firm control variables are constructed using the Compustat Fundamentals Annual database. Industry fixed effects are constructed using 3-digit SIC codes. Robust standard errors are clustered at the director level. The gray lines depict the 95% confidence interval.