Director Tolerance:

Evidence from the appointments of outside directors who have fired CEOs

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Abstract

We study the relation between director tolerance and firm risk taking and board monitoring by examining new board appointments of outside directors who have previously fired a CEO. Appointments of such directors appear to benefit firms with inadequate monitoring but hurt firms in innovative industries. Further, these firms exhibit lower idiosyncratic risk and lower leverage, make less risky acquisitions, experience higher acquisition returns, and are more likely to withdraw bad deals and to replace poorly performing CEOs. They, however, tend to manage earnings when performance deteriorates. Taken together, director tolerance appears to influence managerial behavior and shareholder wealth.

Keywords: Board of directors, Tolerance, Risk Taking, CEO turnover, Director Reputation

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1. Introduction

As representatives of shareholders, outside directors make up arguably the most important internal monitoring and advising body for CEOs of U.S. public firms. Boards of directors regularly evaluate the performance of their CEOs and make decisions on hiring and terminating CEOs. Directors' tolerance of failures, i.e. how much poor performance triggers directors to consider replacing the CEO, therefore, should influence how the CEOs make decisions. We hypothesize two potential effects of board tolerance as follows.

First, several recent studies document that the institutions more tolerant of business failure, such as more "forgiving" bankruptcy laws, are associated with more innovation and risk taking (Acharya and Subramanian, 2009; Acharya et al, 2012). Tian and Wang (2014) find evidence that a VC's tolerance of failure prevents premature termination of risky projects and leads to more innovative startup companies. At the individual level, Hvide and Panos (2014) find that people more tolerant of risk are more likely to become entrepreneurs. In addition, several studies in the management literature suggest a positive relation between corporate tolerance of failure and organizational learnings and innovation.[1] Following the premise of these studies, we hypothesize that boards with more tolerant directors are associated with more risk taking by the CEOs. We label this the risk taking hypothesis.

Too much tolerance of failure, however, may result in managerial shirking. Nohria and Gulati (1996) find that while corporate tolerance of failure fosters more experimentation, such tolerance also diminishes discipline over innovative projects. The finance literature identifies many scenarios of governance failure when directors do not perform sufficient monitoring of CEOs. For example, Weisbach (1988) and Borokhovich, Parrino, and Trapani (1996) find that board dominated by insiders are less likely

[1] See section 2 for a detailed review.

to replace a CEO following a period of poor firm performance. Cotter, Shivdasani, and Zenner (1997) document lower takeover premium for shareholders when the board of the target firm in a tender offer is not independent. Fich and Shivdasani (2006) find that firms with busy boards have poor performance and lower valuation. Coles, Daniel, and Naveen (2014) find that outside directors appointed by CEOs are less likely to punish CEOs for poor performance. Following this strand of literature, we predict that directors less tolerant of failure improve board oversight of management and may add value to firms with weak governance.

Several other studies argue for a tradeoff between a board's monitoring and advising roles and conclude that excessive board monitoring is not necessarily beneficial to all firms. (See Adams and Ferreira, 2007; Harris and Raviv, 2008; Linck, Netter, and Yang, 2007; and Naveen, 2006.) Further, the constant threat of termination imposed by the directors intolerant of failures can also have unintended consequences, e.g. earnings management to hide poor performance. Therefore, for well-governed firms, the additional monitoring imposed by the intolerant directors may be excessive and have a negative effect on firm performance. Taken together, we hypothesize that directors less tolerant of failure increase monitoring, which may benefit firms with weak governance but may hurt well-governed firms. We label this the monitoring hypothesis. Note, however, that the risk taking hypothesis and the monitoring hypothesis are not necessarily mutually exclusive.

Empirically, we first examine the new board appointments of outside directors who have previously fired CEOs (henceforth intolerant directors) at other companies. Firing a CEO is a highly visible signal of the board of directors' intolerance of failure. This is also one of the most important decisions an outside director makes. Outside directors who have fired a CEO, therefore, have established a reputation of not tolerating failures.[2] Since the decision to fire a CEO is endogenously determined by

[2] It is possible that some outside directors vote against a board's decision to fire a CEO. Data of board debate and voting on CEO termination, however, are not publicly available. Farrell and Whidbee (2000) find that outside directors who are more aligned with the outgoing CEOs are more likely to lose their board seats soon after the CEO turnover. In a robustness analysis, we remove such outside directors from the sample of intolerant directors and find similar results. Moreover, if we misclassify some directors who do not support their board's decision to fire a CEO

firm performance and governance, among other factors, we do not examine the firms where the outside directors fire a CEO. Instead, we examine the new board appointments of outside directors who have previously fired a CEO at a different firm. [3] Because firms that appoint a new director may have different characteristics from firms that do not, we identify a sample of firms that appoint a more tolerant director as the benchmark. Specifically, we identify a sample of industry and size matched firms whose boards do not fire their CEOs when these firms experience similarly poor performance as the firms that fire a CEO. We classify the outside directors of the matching firms as the more tolerant directors and compare the new appointments of these directors to those of the intolerant directors.

It is conceivable that firms appointing an intolerant director to their board may be inherently different from the firms that appoint a more tolerant outside director. We explore various firm characteristics, as well as performance and governance metrics, but find little evidence that the two samples of firms are systematically different. We, nevertheless, perform two additional sets of tests to address this potential endogeneity issue. First, we use the Heckman (1979) method to explicitly control for the potential selection bias in all analyses. Second, we use the presence of intolerant directors in a firm's external director network as an instrument for the probability of appointing an intolerant director. Since firms often appoint directors from their director network, a higher fraction of intolerant directors in the network should have a mechanical relation with the probability of one of such director being appointed. This instrument, therefore, satisfies the relevant condition. The characteristics of the directors in a firm's external director network, nevertheless, are arguably relatively exogenous. We argue that the fraction of intolerant directors in a firm's external network is unlikely to be correlated with the firm's

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as intolerant directors, such misclassification works against finding significant differences between firms that appoint intolerant directors and those that appoint tolerant directors.

[3] We do not simply contrast a sample of firms with intolerant directors to those without because there are three different categories of firms that may have an intolerant director on board: i) the turnover firms; ii) other firms an intolerant director sits on at the time of the turnover event; and iii) other firms that later appoint an intolerant director. We do not examine the turnover firms because of endogeneity issues. While we as econometricians rely on the turnover events to identify intolerant directors, CEOs of the other firms these directors sit on may observe the directors's lack of tolerance well before the turnover event, thus may make little change to their corporate policies. Our main sample, therefore, consists of firms that appoint an intolerant director after she reveals her intolerance through firing a CEO.

performance or risk taking policies. We report all our main tests with the Heckman correction or the instrument variable method and findings are similar.

In the empirical analysis, we first show that after joining a new board, an intolerant director is more likely to fire the CEO when the firm suffers from poor performance. This finding establishes that a director's tolerance of failure has an individual-level component that influences all the boards she sits on. We next examine whether intolerant directors improve the performance of firms whose CEOs otherwise lack monitoring. We measure a firm's lack of monitoring with the entrenchment index of Bebchuk, Cohen, and Ferrell (2009). We find that the presence of intolerant directors is associated with significantly better operating performance for firms that otherwise lack external monitoring of their CEOs. While this evidence suggests that the additional monitoring brought in by the intolerant directors benefit firms with insufficient monitoring, we also find some evidence that the presence of an intolerant director may not benefit already well-governed firms. In addition, consistent with the positive relation between organizational tolerance and innovation documented in the prior literature, the presence of an intolerant director is associated with significantly poorer performance and lower valuation for firms in the more innovative industries. Further, firms with an intolerant director are more likely to engage in real earnings management, in particular when operating performance has been poor. These results support the monitoring hypothesis.

To test the risk taking hypothesis, we examine the idiosyncratic risk and financial leverage of the firms that appoint an intolerant director. We document that after an intolerant director joins a board, these firms take significantly less risk when compared to the firms appointing a more tolerant director. The presence of an intolerant director on average is associated with a 3% lower idiosyncratic risk. In addition, firms with an intolerant director on average have 4% lower leverage. Both findings support the risk taking hypothesis.

We next use the setting of mergers and acquisitions to examine whether and how director tolerance influences CEO decision making. Specifically, we conduct the following four analyses. First, we find that firms with an intolerant director on board are more likely to withdraw a takeover bid that is

poorly received by the stock market. This evidence suggests that bidder CEOs facing implicit termination threat from an intolerant director may be more willing to correct her mistakes. Second, we examine the medium of payment in acquisitions. In a cash acquisition, the acquirer shareholders face the entire uncertainty risk associated with (the future realization of) merger synergy. In addition, cash deals reduce a firm's cash holdings and/or increase its debt obligations, both of which increase the financial risk of the firm. The risk taking hypothesis predicts fewer cash deals by firms with an intolerant director on board, which we find supporting evidence in the data. Third, we document that the bidder announcement return is 1.2-1.4% higher for firms with an intolerant director on board than the firms with the more tolerant directors. Finally, CEOs who make poor acquisition decisions are more likely to be subsequently fired if an intolerant director sits on the board. Overall, our evidence suggests that intolerant directors appear to enable firms to make more prudent and better acquisition decisions, which supports both the risk taking hypothesis and the monitoring hypothesis.

Previous studies identify various board and CEO characteristics that influence a firm's turnover-performance sensitivity, such as board independence, busy boards, co-opt boards, director stock holdings, and CEO power. We control for all these variables in our empirical analyses. Our findings on director intolerance, therefore, captures the marginal effects of a director's personal tolerance beyond the factors related to board characteristics and CEO power.

Taken together, our results suggest that directors' willingness to punish poorly performing CEOs have significant implications for CEO decision making. With such directors on board, CEOs take less risk and make better acquisitions. CEOs with weak monitoring deliver better performance after an intolerant director joins the board. Nevertheless, having intolerant directors on board may put excessive pressure on CEOs to deliver performance and lead to aggressive accounting practices. These findings contribute to the growing literature of corporate governance by illustrating how the threat of termination, even in the absence of the actual punishment, can alter top management behavior and impact shareholder wealth. This evidence points to a previously undocumented channel of how board monitoring works in the absence of visible actions. Our study also contributes to the CEO turnover literature by providing

evidence on the long-lasting impact of CEO turnover on director reputation, and how such reputation may affect other firms. In addition, our evidence contributes to the literature of managerial and directorial expertise and characteristics by illustrating the important role a previously undocumented director character, namely tolerance of failure, plays in shaping corporate policies and firm performance. The rest of the paper is organized as follows. Section 2 reviews previous work in the literature. Section 3 describes the data. Section 4 presents the empirical results. Section 5 concludes.

2. Literature Review

Our paper is related to previous studies on CEO turnover, board monitoring, director reputation and expertise, and organization learning/innovation. In this section, we review these four areas of the literature.

2.1. Outside directors and forced CEO turnover

Our paper is closely related to the role of outside directors in the decision of replacing a CEO. Weisbach (1988) finds a stronger sensitivity of CEO turnover to performance in an outside-dominated board than in a board dominated by insiders. Fich and Shivdasani (2006) report that when the majority of outside directors are busy, the CEO turnover sensitivity to performance is lower. Cai, Garner and Walkling (2009) find that when independent directors receive lower votes in director elections, subsequent CEO turnover is more likely. Faleye, Hoitash, and Hoitash (2011) document that firms with more intense internal monitoring from independent directors exhibit greater sensitivity of CEO turnover to firm performance. Jenter and Lewellen (2011) report a substantially higher CEO turnover-performance sensitivity for companies with small boards that have a majority of independent directors and high director ownership.

Several studies find that outside directors also affect the CEO replacement choice as well as subsequent firm performance. Borokhovich, Parrino, and Trapani (1996) and Parrino (1997) find that boards with more outside directors are more likely to replace an outgoing CEO with a new CEO hired from outside of the firm. Huson, Malatesta, and Parrino (2004) find that after a CEO turnover, firms with

boards dominated by outside directors experience more significant improvement in accounting performance.

Taken together, these prior studies suggest that directors with strong incentive or ability to monitor CEOs are less tolerant of poor performance. In this paper, we study the personal trait aspect of director tolerance of poor CEO performance by identifying outside directors who have previously fired a CEO at a different firm. Nevertheless, we control for various CEO and board characteristics that previous studies find to influence CEO turnover, such as board independence, co-opted board, busy board, and measures of CEO power, in all our empirical analyses. Our findings on director intolerance, therefore, represent the marginal effects of a director's personal tolerance beyond the factors related to board characteristics and CEO power.

2.2. The monitoring role of outside directors

Our paper is also related to the monitoring role of corporate boards in other settings. A number of studies find evidence that monitoring by outside directors adds to shareholder value. For example, Byrd and Hickman (1992) and Cotter, Shivdasani, and Zenner (1997) find more gains to target shareholders of tender offers when their board has more independent directors. Brickley, Coles, and Terry (1994) find that the market reacts positively to announcements of poison pills when the board is independent and reacts negatively when the board is not independent. Paul (2007) presents evidence that firms with independent boards are less likely to complete value-decreasing acquisitions. Perry and Shivdasani (2005) document that firms with boards dominated by outside directors are more likely to initiate asset restructuring and tend to have better subsequent operating performance. Chhaochharia and Grinstein (2009) find a significant decrease in CEO pay for firms that are forced by the Sarbanes-Oxley Act and the related stock exchange requirements to increase the independence of their boards.

In contrast, Hermalin and Weisbach (1991) find that board independence does not appear to be related to firm performance. Some recent studies suggest that some "independent" directors are not truly independent of management and do not monitor CEOs effectively. For example, Shivdasani and Yermack

(1999), Bebchuck (2003), and Cai, Garner, and Walkling (2009, 2013) argue that under the plurality voting standard of director elections, it is often management, rather than shareholders, who decides the composition of a board. Fich and Shivdasani (2006) document that firms with busy outside directors are associated with weak corporate governance. Coles, Daniel, and Naveen (2014) find that outside directors appointed by CEOs tend to be ineffective monitors. Fracassi and Tate (2012) and Hwang and Kim (2009) show that outside directors with social ties with CEOs do not effectively monitor the CEOs.

Several studies examine the tradeoff between a board's monitoring and advising roles and argue that more intense board monitoring is not necessarily beneficial to all firms. Adams and Ferreira (2007) argue that a board not keen on monitoring may be optimal because a CEO is more likely to share information with such a board and receives better advice. Harris and Raviv (2008) also develop a model of optimal control of boards of directors and show that shareholders can benefit from an insider-controlled board under certain circumstances. Consistent with the theoretical models, Linck, Netter and Yang (2007) find empirical evidence that the difference in board structure across firms can be explained by the costs and benefits of board's monitoring and advising roles. Coles, Daniel, and Naveen (2008) document that complex firms, with greater demand for advising, have larger boards and more independent directors. They also show that Tobin's Q increases in board size for complex firms, but decreases in board size for simple firms, and these relations are driven by the number of outside directors. Duchin, Matsusaka, and Ozbas (2010) show that the effectiveness of outside directors depends on the cost of acquiring information about the firm.

In this paper, we examine board monitoring from the aspect of director's tolerance of failure. Our overall evidence suggests that while the more intense monitoring imposed by an intolerant director adds value to firms with weak governance, it may reduce value of well-governed firms. We also contribute to the literature by illustrating how board monitoring can influence a firm's risk taking decisions.

2.3. Director reputation and experience

Fama (1980) and Fama and Jensen (1983) argue that the external labor market rewards outside directors who signal their expertise. Several empirical studies show that outside directors of firms that perform well are more likely to gain additional board seats (Ferris, Jagannathan, and Pritchard, 2003 and Yermack, 2004). Similarly, Ertimur, Ferri, and Stubben (2010) find that outside directors who implement shareholder proposals that receive majority vote support appear to keep more directorships than their peers. Fich and Shivdasani (2007) document that outside directors of firms involved in financial frauds are more likely to lose their board seats in other firms. Harford and Schonlau (2013) find that directors and executives who have experience of large acquisitions are more likely to gain subsequent board seats.

Removing a poor-performing CEO is a highly visible signal that outside directors can send to the market about their monitoring effort. Jensen (1993) argues that directors have little incentive to fire a poorly performing CEO because of the possibility of losing current directorships. Nevertheless, Farrell and Whidbee (2000) find that outside directors who hold large equity stakes and who are not closely aligned with the outgoing CEO tend to stay on the board and gain more board seats in other companies.

Several recent studies suggest that director experience has a significant influence on corporate policies and performance.[4] For example, Celikyurt, Sevilir, and Shivdasani (2014) find that mature public firms appointing a venture capitalist to their boards experience subsequent increase in R&D investment and output, as well as improvement in operating performance and acquisition returns. Dass, Kini, Nanda, Onal, and Wang (2014) find that directors from a firm's upstream/downstream industries have a significant positive impact on firm valuation and performance. These directors also help their firms to better handle industry shocks. Huang, Jiang, Lie, and Yang (2014) find that firms with directors who have

[4] In a related literature, a number of recent studies examine various experiences and characteristics of CEOs and how such experiences and characteristics affect corporate policies and performance. See, for example, Benmelech and Frydman (2014), Cronqvist, Makhija, and Yonker (2012), Custódio, Ferreira, and Matos (2013), Custódio and Metzger (2013, 2014), Davidson, Dey, and Smith (2014), Fee, Hadlock, and Pierce (2013), Graham, Harvey, and Puri (2013), Hirshleifer, Low, and Teoh (2012), Kaplan, Klebanov, and Sorensen (2012), Malmendier and Tate (2008), Malmendier, Tate, and Yan (2011), and Mironov (2014), among others.

investment banking experience are more likely to make acquisitions that perform better both at the announcement and in the long run.

In this paper, we examine how a director's reputation of not tolerating failures, signaled by her experience of firing a poorly performing CEO, influences corporate policies and firm performance.

2.4. Management literature on organizational tolerance and innovation

A number of studies in the management literature have examined the relation between tolerance of failure and organizational learning and innovation. For example, using data of 58 strategic business units, Gupta and Govindarajan (1984) show that greater managerial tolerance of risk taking and uncertainty contributes to the development of such units. West (1990) and Edmondson (1999) show that a work environment that provides psychological safety encourages organizational learning and innovation. Leonard-Barton (1995) argues that cultural norms such as willingness to value and respond to diversity, openness to criticism and tolerance of failure contribute to knowledge creation. Nohria and Gulati (1996) argue that corporate tolerance of failure fosters greater experimentation but also diminishing discipline over innovative projects, resulting in a curvilinear relation between tolerance and innovation. Taylor et al. (2010) regard the tolerance of failure as one of the three basic policies for organizational learning. In this study, we examine how board tolerance of failure influences firm performance and risk taking, in particular, depending on the innovativeness of the industry.

3. Data

We first identify 3,199 CEO turnover events during the period of 1995-2010 from the Compustat ExecuComp database. We then manually search the Factiva news database for detailed information about these CEO turnover events and identify 437 forced turnovers following the algorithm of Parrino (1997). [5]

[5] A CEO could be fired for reasons other than poor returns to shareholders. We identify 54 cases in our sample where the three-year industry adjusted stock return is non-negative. Careful reading of news articles reveals that most of these CEOs are terminated due to scandals, strategic disagreements with their boards, or unsatisfactory performance (from the board's point of view). In a sensitivity test, we exclude these cases and find similar results.

For each of the 437 forced turnover events, we identify a matching firm that satisfies the following criteria: i) the matching firm belongs to the same industry as the turnover firm, using the Fama and French (1997) 48-industry classification; ii) the matching firm has market capitalization between 50% and 200% of that of the turnover firm; iii) the matching firm does not experience a forced CEO turnover event during the 5-year period from year –2 to year +2 where year 0 is when the turnover firms fires its CEO; and iv) the matching firm has the closest industry-adjusted three-year stock return to that of the turnover firm.[6] We define a director as an intolerant director if she is an outside director of the firm that fired their CEO. These directors revealed to the market their willingness to fire an under-performing CEO. The outside directors of the matching firms show more tolerance for poor performance and are classified as tolerant directors. If a director sits on both a turnover firm board and a matching firm board, she is excluded from the analysis. From the 437 firms that fire a CEO and the 437 matching firms, we identify 2,666 intolerant directors and 2,570 tolerant directors.

For each intolerant and tolerant director, we search for all their future board appointments as outside directors during the period of 1996-2012 using the BoardEx databases. We also require available data from the Center for Research in Security Prices (CRSP), Compustat, Risk Metrics, and Execucomp databases. Our final sample consists of 392 new board appointments of the intolerant directors and 334 appointments of the tolerant directors. [7]

Table 1, Panel A reports the size and performance of the turnover firms and matching firms. The results show that there is no systematic difference in firm size or performance measures between the turnover firms and the matching firms. Both samples have three-year stock returns substantially below industry median.

[6] Using these four criteria, in 15 cases, the same non-event firm is matched to two event firms. In these cases, we select the second best match for one of the event firms so that the overall performance difference between the event firms and the match firms is minimized.

[7] In an untabulated t-test, we find no significant difference between the proportion of intolerant directorswho obtain new board seats and the proportion of tolerant directors who obtain new board seats. A logistic regression in Table 2 also shows that intolerant directors are neither more nor less likely to gain new appointments than tolerant directors.

Panel B of Table 1 reports the characteristics of the intolerant and tolerant directors at the time of a forced CEO turnover. Interestingly, intolerant directors are more likely to be female and have shorter tenure than tolerant directors. Intolerant directors, however, are more likely to have joined the firms before the CEO they fire, i.e. they are less likely to be appointed by the outgoing CEO. Intolerant directors are also more likely to sit on nomination and governance committees than their tolerant peers. Moreover, intolerant directors have more board seats in other firms. These results suggest that the intolerant directors have more power at the firms that fire their CEOs than the tolerant directors at the matching firms. We later show that, however, the intolerant directors do not have more power than their peers in the firms of their future board appointments.

If an intolerant director's probability of gaining a future board seat differs from that of the matching firm directors, our analysis may have a selection bias. We, therefore, examine whether an intolerant director is more or less likely to gain future board seats at other firms. Table 2 reports a logistic regression where the dependent variable equals one if an intolerant director or a matching firm director gains at least one new board seat after the turnover event. Independent variables include an indicator of intolerant director, size and performance of the turnover (or matching) firm, and director characteristics such as age, gender, number of board seats, tenure, committee memberships, whether the director is a CEO, and whether the director leaves the turnover (or matching) firm within 2 years. We also control for interaction terms between the tolerant director indicator and indicators for a positive CEO turnover announcement CAR and for the director's leaving the turnover firm within two years. These interaction terms are designed to capture the potential impact of the decision to fire a CEO on the future board appointments of the intolerant directors. Standard errors are clustered by directors in this regression to address the potential residual correlations among the firms with the same directors.

Table 2 shows that intolerant directors are neither more nor less likely to receive additional directorship than the matching firm directors. In addition, the probability of receiving future directorship is also unrelated to the market reaction to the announcement of the CEO turnover. For both the intolerant directors and the matching firm directors, losing their own board seats significantly reduces their chance

of getting a board seat elsewhere, although the effects are not significantly different between the intolerant directors and their peers. Consistent with prior studies, the probability of obtaining additional directorship does appear to be related to director ability and reputation. For example, the more board seats a director already has, the more likely she is hired by another board. Further, we document that directors of larger firms and directors of firms with better stock performance are also more likely to gain new directorships (similar to Ferris, Jagannathan, and Pritchard, 2003 and Yermack, 2004). In addition, directors who are a CEO themselves also have a significantly better chance of gaining new directorships (as in Fich, 2005 and Fahlenbrach, Low, and Stulz, 2010). On the other hand, older directors and directors with longer tenure are less likely to be appointed to the board of another firm (similar to Yermack, 2004). Finally, female directors have greater chance of getting new board seats. Overall, the results in Table 2 reveal that directors in our samples are appointed to new board seats because of their expertise rather than their experience (or lack of) of firing a CEO.

Since Table 1, Panel B suggests that the intolerant directors at the turnover firms on average appear to have more power than the tolerant ones at the matching firms, we next examine whether the future board appointments of the intolerant directors are systematically different from those of their peers. Table 3, Panel A reports the characteristics of the appointed directors. The results show that the appointed intolerant directors are not significantly different from the appointed tolerant ones in gender, number of board seats, whether they are the CEO of another firm, and the number of committee memberships at their other board seats. Intolerant directors, however, appear to have shorter tenure and are less likely to be on the audit committees at their other boards. Overall, we find no evidence that the intolerant directors who receive future board appointments are systematically different from the tolerant directors.

Panel B compares the characteristics of the firms that appoint an intolerant director to those of the firms that appoint a tolerant director. The results reveal no significant difference in firm size, book-to-market ratio, Tobin's Q, leverage, cash holdings, R&D expenditure, idiosyncratic risk, and stock and accounting performances between the two groups of firms. Board and CEO characteristics, such as busy board, coopted board, outside director holdings, institutional holdings, CEO-chairman and CEO-founder

dualities, CEO tenure, CEO stock holdings, and CEO pay are also similar between these two groups. The only two significant differences are that firms appointing an intolerant director tend to have lower proportion of independent directors on their boards and higher entrenchment index than firms appointing a more tolerant director. This evidence may indicate that the firms appointing an intolerant director need more board monitoring or that a more entrenched CEO is not threatened by a director who has fired another CEO before. The overall takeaway from Panel B of Table 3, however, is that the choice between appointing an intolerant director or a more tolerant one appears to be largely unrelated to the characteristics of the appointing firms.

We next estimate a Probit regression in Panel C of Table 3 to analyze the potential determinants of the choice between appointing an intolerant director and appointing a tolerant director. The dependent variable in both models equals one if a firm appoints an intolerant director and zero if the newly appointed director is a tolerant candidate. Independent variables include performance, governance, and other firm characteristics at the end of the fiscal year preceding the director appointments. We use the fractions of (in)tolerant directors in the hiring firms' director network as instruments, since firms often appoint candidates from their own directors' network. One the other hand, there is no obvious reason to believe that a firm's corporate policies, such as risk taking, and performances would be influenced by the characteristics of other firms' directors (excluding the overlapping directors). In this regression, standard errors are clustered by directors to address the potential residual correlations between firms that appoint the same directors.

As expected, the fraction of (in)tolerant directors that share boards with hiring firms' directors is positively related to the chance of these firm appointing an (in)tolerant director. According to Model (1), a 10% increase in the fraction of (in)tolerant directors in the hiring firms' network is associated with a 14% (11%) increase in the probability of the firm appointing an (in)tolerant director. Consistent with the univariate results in Panel B of Table 3, firms with higher entrenchment index and firms with the CEO also serving as the chairman of the board are more likely to appoint an intolerant director. All other firm, board, and CEO characteristics do not appear to influence the choice between appointing an intolerant

director or a more tolerant one. This result suggests that the sample of firms appointing an intolerant director is not systematically different from the sample of firms appointing a tolerant one and the selection bias is unlikely to be a major issue in this study. We, nevertheless, control for the inverse Mill's ratio from this model in one specification of all subsequent tests where we contrast the firms appointing an intolerant director and firms appointing a tolerant director. Furthermore, in another specification of subsequent tests, we use the fitted value estimated from this model as an estimation of the probability of appointing an intolerant director and include this variable as the main independent variable. The following tests also use standard errors clustered at director level to draw statistical inferences.

4. Main Results

4.1. Board appointments of intolerant directors and subsequent CEO turnover

An outside director's intolerance of failure, i.e. her willingness to replace the CEO given a level of poor performance, may depend on her relationship with the CEO, her private information of CEO effort, and other firm specific factors. It is possible that an outside director tolerance of poor performance may be mainly driven by firm-specific factors as opposed to being her personal trait. If this is the case, our approach of examining subsequent board appointments of directors who have previously fired a CEO may yield little useful inference. We, therefore, first examine whether an intolerant director is more likely to replace another CEO when performance is poor.

To test this prediction, we estimate in Table 4 three logistic regressions where the dependent variable equals one if a firm experiences a forced CEO turnover, and zero otherwise. The sample consists of a panel of 2,042 firm/year observations of the 726 firms that appoint either a tolerant director or an intolerant one. For each of the 726 director appointments, we track the years subsequent to the appointment for as long as the appointed director stays on the board. The intolerant director variable in Models (1) and (2) is an indicator equal to one if the appointed candidate is an intolerant director, while the instrumented intolerant director in Model (3) is the predicted probability of firm hiring an intolerant director estimated from Table 3, Panel C. Our main variable of interest is an interaction between the

intolerant director variable and a dummy variable for stock return being below industry median in the previous three years, using the Fama-French 48-industry classification.[8] This variable captures the sensitivity of forced CEO turnover to poor firm performance when an intolerant director is on the board. We control for various firm characteristics such as firm size, book-to-market, and various governance, board, and CEO characteristics.

All three models of Table 4 reveal a positive and significant coefficient of the interaction term between the intolerant director variable and the indicator for poor firm performance. This result suggests that CEOs with poor performance are more likely to be forced out when an intolerant monitor is on the board. Using the marginal effect of the coefficient in Models (1) to (3), we estimate that the presence of an intolerant director is, on average, associated with an 8.8% to 9.5% higher likelihood of forced CEO turnover when stock return underperforms the industry. This figure compares to an unconditional forced CEO turnover probability of 5.2% in our sample. The coefficient of the negative industry adjusted return indicator itself, on the other hand, is not statistically different from zero, which suggests that the presence of a tolerant director does not increase the chance of forced CEO turnover when stock performance is poor.

We note that other control variables yield similar results as prior studies in the CEO turnover literature. For example, similar to Huson, Parrino, and Starks (2002) and Lehn and Zhao (2006), we find that CEOs with high stock ownership in the company are less likely to be fired. Consistent with Ertugrul and Krishnan (2010), we show that a CEO who also serves as the chairman of the board is less likely to be forced out.

Overall, the results in Table 4 suggest that a director intolerant of failure at a company is also likely to be intolerant of failures of other companies. That is, at least some component of a director's intolerance of failure is a personal trait and influences all the boards she sits on. This evidence validates

[8] Our results are robust when we use the market adjusted stock return as a proxy for performance or measure the performance over previous one year.

our approach of testing the implications of director tolerance with the subsequent board appointments of a director who has fired a CEO.

4.2. Director tolerance and firm performance

The monitoring hypothesis posits that directors less tolerant of failure are more effective monitors and may add value to firms with weak oversight. Excessive board monitoring of CEOs, however, may have a negative effect on performance, in particular for firms that already have sufficient governance mechanisms in place, or for firms where innovation is an important factor of value creation. We examine in this section the relation between director tolerance and firm performance using interaction variables between director tolerance and firm governance or innovation. Table 5 reports regressions where dependent variables are industry adjusted ROA, ROE, and Tobin's Q, respectively. In Panel A, our main variables of interest are the interaction term between the intolerant director variable and the entrenchment index of Bebchuk, Cohen, and Ferrell (2009), which contains anti-takeover provisions that draw opposition from institutional investors and is, therefore, indicative of agency conflict and CEO power. Other independent variables in all models of both panels include firm size, book-to-market ratio, and board and CEO characteristics. To control for firm-level persistence in the dependent variables, we also include the levels of industry adjusted ROA and ROE prior to the director appointments as independent variables in the respective regressions.

We first report the relation between director tolerance and operating performance. Models (1), (2) and (3) present the results for the regressions where the dependent variable is the industry adjusted ROA. All three models report positive coefficients for the interaction terms between the intolerant director variable and the entrenchment index. All three coefficients are statistically significant at the 1% or 5% level. This result indicates that the appointments of an intolerant director benefit firms that otherwise lack monitoring of their CEOs and the benefit is greater for firms with higher E-index. Using the interaction coefficient in Model (2), we estimate that for firms with four takeover protections in the E-index, having an intolerant director is associated with 1.2% ($0.003 \times 4 = 0.012$) higher industry adjusted ROA. In Models

(4), (5), and (6) where the dependent variable is the industry adjusted ROE, the interaction term between intolerant director and E-index is again positive and statistically significant at 5% or higher in all three specifications. Using the coefficient of Model (5), we estimate that for firms with four takeover protections having an intolerant director is associated with 6.8% (0.017×4 = 0.068) higher industry adjusted ROE. These results suggest that the presence of intolerant directors is associated with improved operating performance for firms with entrenched CEOs.

We next examine whether the board tolerance is related to the overall firm value. Models (7), (8), and (9) report the regression results where the dependent variable is industry adjusted Q. Model (7) shows a positive but statistically insignificant coefficient of the interaction term between the intolerant director dummy and E-index. The interaction term, however, is significant at 10% level and 5% level in Model (8) and (9), respectively, which suggests that intolerant directors may add value to firms with entrenched CEOs after we correct for potential endogeneity. According to Model (8), for firms with four takeover protections in the entrenchment index, the presence of an intolerance director is associated with 0.12 higher industry adjusted Q (0.031×4=0.124).

We note that the intolerant director variable itself in Models (1), (4), (5), and (9) is negative and statistically significant, although not different from zero in other models, which suggests that the intolerance director might be associated with lower performance and valuation for firms that already have sufficient board monitoring of their CEOs.

Since a number of studies show that a more tolerant environment is often associated with innovation, we next examine whether having an intolerant director hurts the performance and valuation of firms in the more innovative industries. As in Panel A of Table 5, the dependent variables in Panel B are also the industry adjusted ROA, ROE, and Q. The main independent variable in Panel B is an interaction term between the intolerant director variable and the average number of patents applied in the appointing firm's industry as a proxy for innovation.[9] The patent data from 1976 to 2006 is provided by National

[9] Our results are robust if we use the number of patents applied by the appointing firms in the five years prior to the appointments of the (in)tolerant directors as a proxy for innovation.

Bureau of Economic Research (NBER). Note that the sample size in Panel B is smaller (685 firm/year observations) because the patent data are unavailable after 2006. Other control variables are the same as in Pane A.

Panel B of Table 5 reports a negative and statistically significant coefficient of the interaction term between the intolerance director variable and the average number of industry patents in all nine models. This result indicates that for a firm operating in an innovative industry, having an intolerant director is associated with lower firm value and performance. The economic magnitude of the coefficients is also meaningful. For example, according to Model (1), (4), and (7), for a firm in an industry with average ten patents applied annually, the presence of an intolerant director is associated with an average decrease of 0.6%, 0.5%, 10.4% in industry adjusted ROA, ROE, and Q, respectively. This finding is consistent with the existing literature on the impact of tolerance of failure on firm innovation.

4.3. Director tolerance and corporate risk taking

The risk taking hypothesis posits that because the intolerant directors pose an implicit threat that CEOs may be terminated if firm performance falls below a threshold, CEOs of the firms with such directors on board may optimally choose to take less risk to minimize the chance of being fired.[10] We test this hypothesis by comparing idiosyncratic risk, leverage, and acquisition decisions of firms with intolerant directors to those with more tolerant directors.

Table 6 presents the regression results where the dependent variable is a firm's idiosyncratic risk (Models (1) to (6)) or leverage ratio (Models (7) to (9)). We estimate a firm's idiosyncratic risk in two ways: In Models (1), (2) and (3), idiosyncratic risk equals the standard deviation of the residuals from a return regression estimated with daily stock returns during a firm's fiscal year where the independent variable is the average stock return in the industry, with industry defined by the Fama-French 48-industry classification. In Models (4), (5) and (6), idiosyncratic risk is estimated with the CRSP valued-weighted

[10] Bushman, Dai, and Wang (2010) find that the likelihood of forced CEO turnover increases in firm idiosyncratic risk.

market return being the independent variable in the return regression. The main independent variable in Table 6 is the intolerant director indicator (Models (1), (2), (4), (5), (7), and (8)) or the instrumented variable for intolerant directors (Models (3), (6), and (9)). Model (1) reveals that firms with an intolerant director on average have a 0.9% lower idiosyncratic volatility. Since the average firm in our sample has an idiosyncratic risk level of 26%, having an intolerant director on board on average is associated with a 3% (0.9%÷26%=0.03) lower idiosyncratic risk. In Model (2), we include the inverse Mill's ratio from Panel C of Table 3 as an independent variable to correct for the potential selection bias and the coefficient of the intolerant director indicator is similar. The higher coefficient (-3.3%) of the instrumented variable of intolerant director in Model (3) indicates that the exogenous component of the intolerant director variable has a greater association with idiosyncratic risk of the appointing firm than does the potentially endogenous components. In Models (4), (5) and (6), we report the regressions where the dependent variable is the market-benchmarked idiosyncratic risk. Our results are very similar to those in Models (1), (2) and (3). In Models (1) to (6), we control for firm size, ROA, book-to-market ratio, and a number of board and CEO characteristics. Because idiosyncratic risk may be persistent at the firm level, we include a firm's level of idiosyncratic risk before the director appointments as an independent variable in all models. Not surprisingly, this variable is highly significant in all regression models, which is consistent with the notion that idiosyncratic risk is persistent.

We next examine whether having an intolerant director on board influences a firm's capital structure decisions. Models (7) to (9) of Table 6 reports the regression results where the dependent variable is the leverage ratio of a firm and the main independent variable is the intolerant director indicator (Models (7) and (8)) or the instrumented intolerant director (Model (9)). Model (7) reports a statistically significant coefficient of -0.0063 for the intolerant director indicator. Since the average firm in our sample has a market leverage ratio of 0.16, having an intolerant director on board on average is associated with a 3.9% (0.0063÷0.16 =0.039) lower leverage. In Model (8), we further control for the inverse Mill ratio from Table 3 and find very similar results. The instrumented intolerant director in Model (9) yields a coefficient of 0.98% and this coefficient is statistically significant at 5% level. Since

leverage ratios are highly persistent (Lemmon, Roberts, and Zender, 2008), we control for a firm's leverage ratio before the board appointment in all three regressions. As expected, this variable is positive and highly significant.

4.4. Director tolerance and acquisition decisions

Acquisitions represent some of the most important corporate decisions that can substantially alter a firm's risk exposure and firm value. In this section, we examine whether director tolerance influences a firm's acquisition decisions using a sample of 326 bids, 187 of which are made by firms that have an intolerant director on board and 139 are made by firms that have a tolerant director. Specifically, we examine the following four questions.

First, are firms with an intolerant monitor more likely to withdraw a value destroying deal? After merger announcements, the bidder management receives new information about the quality of the deal from the stock market reaction. We hypothesize that having an intolerant director on board may render the bidder CEO to reassess the deal quality and terminate low quality deals.

We estimate a logistic regression in Table 7 where the dependent variable takes the value of one if a deal is completed and zero otherwise. Our variables of interest include the intolerant director indicator (Models (1) and (2)) or the instrumented intolerant director (Model (3)) and its interaction with an indicator of negative abnormal bidder announcement returns. This interaction term captures the effect of an intolerant director on the probability of the bidder withdrawing a deal ill received by the market. In all models, the coefficient of the interaction term between the intolerant director variable and the negative bidder return indicator is negative and significant. This result suggests that in contrast to the firms with a more tolerant director, firms with an intolerant director are more likely to withdraw deals ill received by the market. Using the marginal effect of the interaction terms in Model (2), we estimate that firms with an intolerant director are 4% more likely to withdraw an acquisition when the market reacts unfavorably to the deal announcement, which compares to the unconditional withdraw probability of 15% in our sample. This result is consistent with the risk taking hypothesis.

The results of other control variables in Table 7 are in agreement with those in previous studies. For example, similar to Officer (2003) and Bates and Lemmon (2003), we find that tender offers and transactions with a target termination fee provision are more likely to be completed. As in Bates and Lemmon (2003), we find that hostile deals have a lower chance of completion.

Second, do bidders with intolerant directors use less risky financing to pay for acquisitions? Acquisitions are typically paid with stock, cash, or a mixture of both. In stock deals, all future synergies or losses are shared by the acquirer and target shareholders. In contrast, the acquirer shareholders face the entire uncertainty risk of merger synergies in cash deals. In addition, cash deals reduce a firm's cash holdings and/or increase its debt obligations, both of which increase the financial risk of the firm. We hypothesize that CEOs of firms with intolerant directors are less likely to pay acquisitions with cash.

We estimate a logistic regression in Table 8 where the dependent variable takes the value of one if an acquisition is paid with all cash and zero otherwise. All three models in Table 8 report a negative and significant coefficient for the intolerant director variable. Using the marginal effect of this coefficient in Model (1), we estimate that firms with an intolerant director on board are on average 15% less likely to pay the target firm with cash. This figure compares to the 49.3% unconditional probability of cash deals in our sample. This evidence suggests that the presence of an intolerant director on a bidder's board is associated with less risk taking in acquisitions.

Other control variables in Table 8 yield similar results as in the existing literature. For example, similar to Martin (1996) and Faccio and Masulis (2005), we find that a deal is more likely to be paid with cash if it is a tender offer or if the deal value is relatively small when compared to the bidder's size.

Third, do firms with an intolerant director make better acquisitions? Previous studies document that bidders on average earn zero to negative returns upon the announcement of an acquisition. Bidders with overconfident managers or more severe agency problems tend to overpay for the target firms and experience more negative abnormal announcement returns (Roll, 1986; Lang, Stulz, and Walkling, 1991; Malmendier and Tate, 2008; among others). Having an intolerant director who is willing to fire a CEO with poor performance may reign in the CEOs from making value destroying deals.

We examine the relation between the presence of an intolerant director and acquisition announcement returns in Table 9. The results in the three models of Table 9 reveal that the bidder firms with an intolerant director on average earn 1.2% to 1.4% higher abnormal announcement returns, compared to an average of -0.4% abnormal returns in our sample. In all three models, the coefficient of the intolerant director variable is statistically significant at the 5% level. We also control for a number of deal, firm, and governance variables. This result suggests that having an intolerant director on board helps firms make better acquisition decisions and is consistent with the monitoring hypothesis.

We note that most of the control variables in Table 9 yield results that are in line with the existing literature. For example, as in Moller, Schlingemann, and Stulz (2004) and Masulis, Wang, and Xie (2007), we find that the acquirer's size is negatively related to the acquirer's CAR. Similar to Moller, Schlingemann, and Stulz (2005), smaller deals earn higher abnormal returns at deal announcements.

Finally, are firms with an intolerant director more likely to experience forced CEO turnovers after a bad acquisition? Lehn and Zhao (2006) document an inverse relation between bidder announcement returns and the likelihood of subsequent CEO turnover. Since the intolerant directors have revealed their preference to discipline poorly performing management, we hypothesize that acquiring firm CEOs are more likely to be forced out after a value-reducing acquisition if an intolerant monitor sits on the board.

Table 10 presents the logistic regressions where the dependent variable equals one if the acquiring firm CEO is forced out within three years of the acquisition, and zero otherwise. The sample consists of 277 mergers that are completed by the firms that have appointed either an intolerant director or a tolerant director. To capture the incremental CEO turnover sensitivity to deal performance when an intolerant monitor is present, we use an interaction variable that is the product between the intolerant director variable and an indicator for negative bidder announcement return. The variable of intolerant director variable in Models (1) and (2) is an indicator equal to one if the appointed director is an intolerant director and zero otherwise. The intolerant director variable in Model (3) is the predicted probability of appointing an intolerant director estimated from Table 3, Panel C.

Table 10 reports a positive and statistically significant coefficient of the interaction term in all three models. This result suggests that CEOs who make value-destroying mergers are more likely to be forced out when an intolerant director serves on the board. The economic magnitude of the coefficients is also meaningful. Using the marginal effect of the coefficients in Models (1) to (3), we estimate that on average, a bidder CEO is 12% to 15% more likely to be forced out within three years of a bad acquisition when an intolerant director sits on the board. This figure compares to the unconditional post-merger probability of forced CEO turnover of 15.8% in the sample of the 277 completed mergers. In contrast, the coefficient of the negative bidder return indicator itself is not statistically different from zero, which suggests that the more tolerant directors do not discipline CEOs who engage in value-destroying mergers. This finding corroborates with our evidence that bidders with an intolerant director on board on average make more prudent and better acquisition decisions.

Taken together, the evidence in Tables 7 to 10 suggest that the threat of discipline, posed by an intolerant monitor, significantly influences how top managers make acquisition decisions. The disciplinary threat discourages bidders from making risky and value-destroying deals and leads to better acquisition performance.

4.5. Director tolerance and earnings management

While the threat of termination posed by an intolerant director may improve CEO performance in firm that lacks board oversight, the termination threat may also put excessive pressure on the CEO to deliver short term performance. We hypothesize that these firms are more likely to engage in aggressive accounting practices when accounting performance is poor. Table 11 reports regressions where the dependent variables are accrual-based earnings management and real earnings management, respectively. Real and accrual-based earnings management levels are estimated following Cohen, Dey, and Lys (2008). Our main variables of interest in all models include the intolerant director indicator (Models (1), (2), (4) and (5)) or an instrumented variable for intolerant director (Models (3) and (6)) and its interaction with an indicator of below-industry-median ROA in the prior year. Industry classification is based on Fama and

French (1997). In all regressions, we control for various firm, board, and CEO characteristics. To address the possibility that earnings management of a firm might be persistent, we control for the pre-appointment level of earnings management in the respective regressions.

While Models (1), (2) and (3) of Table 11 find no evidence of additional accrual management by the poorly performing firms with the presence of intolerant directors, Models (4), (5), and (6) reveal that these firms are more likely to engage in real earnings management. The coefficient of the interaction term between the intolerant director variable and the indicator of below-industry-median ROA is positive and statistically significant in Models (4) to (6). The effect is also economically meaningful. The coefficients of the interaction terms in Models (4) reveals that firms with an intolerant director have an average real earnings management level of 3.8% of its total assets when prior year ROA is below industry average. This figure compares to an average ROA of 5.8% in the current year for this sub-sample of firms. In contrast, the poorly performing firms with a tolerant director on their boards do not engage in more real or accrual-based earnings management, as evidenced by the insignificant coefficient of the indicator of below-industry-median ROA in all six models. This evidence that firms with an intolerant director engage more in real earnings management, which is less likely to be detected (Roychowdhury, 2006; Cohen, Dey, and Lys, 2008) but more damaging (Cohen and Zarowin, 2010; Zang, 2012) than accrual management, points to a negative effect of having excessive pressure on a CEO and is consistent with the monitoring hypothesis.

4.6. Additional tests

4.6.1. Removing intolerant directors who might have been aligned with the outgoing CEO

It is possible that not all outside directors support a board's decision to fire a CEO. By classifying all of them as intolerant directors, we may misclassify some of the more tolerant directors (those who vote against firing the CEO) as intolerant directors. Farrell and Whidbee (2000) find that outside directors who are more aligned with the outgoing CEOs, thus more likely to vote against the CEO termination decision, tend to lose their board seats soon after the CEO turnover. Klein (1998) and Farrell and Whidbee (2000)

argue that a director may be more aligned with the outgoing CEO if she is a relative of top managers, a former employer of the firm, or a member of a decision making committee (such as finance, M&A, or strategic planning), as opposed to a monitoring committee (such as audit, compensation, or nomination). In robustness tests, we remove such directors and those who leave the turnover firm boards within two years after the CEO turnover from the sample of intolerant directors and find similar results as in Tables 1 to 11.

4.7.2. Separating intolerant directors who were hired by the outgoing CEO and those who appointed the CEO

One may argue that if an intolerant director was hired by the outgoing CEO, her decision to fire the CEO is a stronger indication of intolerance. Therefore, we may expect that these directors have a greater influence on the firms that they later join. On the other hand, if an intolerant director had appointed the outgoing CEO, her firing the CEO may indicate that she is correcting her own mistake of making a poor choice. We separate the sample of the intolerant directors into two subsamples – one consisting of the directors who join the firm before the outgoing CEO and the other consisting of the directors joining after the CEO. Our results of Tables 1 to 11 are robust in both subsamples, and there is no evidence that the results in one group are stronger than in the other.

5. Conclusion

Individuals have different tolerance levels for failure, influenced by their cultural background, education, personality, and upbringing, which in turn affect other people, in particular their subordinates' decision making. In this study, we examine how a director's revealed tolerance for CEO failures influences firm risk taking and performance. Specifically, we examine the new appointments of a sample of directors who have previously fired a CEO and a matching sample of directors who have not done so. We find that for firms with inadequate monitoring of their CEOs, those appointing an intolerant director benefit from improved performance and higher valuation, although excessive monitoring by these

intolerant directors may hurt well-governed firms or firms in innovative industries. Firms with an intolerant director also exhibit significantly lower idiosyncratic risk. In addition, these firms take less risk in acquisitions and their acquisition announcements are better received by the stock market. These firms, however, are also more likely to manipulate earnings, perhaps in an attempt to disguise poor performance. The cumulative evidence of this study suggests that director intolerance of failure significantly reduces corporate risk taking and strengthens board monitoring, albeit such monitoring may not necessarily benefit all firms.

Our findings contribute to the growing literature of corporate governance by illustrating the importance role that the threat of punishment, even in the absence of actual actions, plays in board monitoring, as well as its consequence for firm policies and shareholder value. The evidence in this study also sheds new light on how director reputation and experience influences CEO decision making.

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Appendix 1: Variable definitions

Accrual-based and standardized real earnings management are estimated using the methodology of Cohen, Dey, and Lys (2008).

Board size is the total number of directors in the board.

Book-to-market (BM) equals the book value of common equity divided by the market value of common equity.

Busy board (1/0) equals one if at least 50% of the independent directors of a board hold three or more directorships in publicly traded firms, and zero otherwise.

CAR(-1,+1) of an acquisition, a CEO turnover, or a director appointment announcement is cumulative abnormal returns (CARs) during [AD–1, AD+1] of the acquiring firms based on a standard market model estimated during the time period of [AD–272, AD–21], where AD is the announcement date of the acquisition, the CEO turnover, or the director appointment.

Cash payment (%) is the proportion of acquisition payment made in cash.

CEO chairman (1/0) equals one if a CEO is also the chairman of the firm and zero otherwise.

CEO founder (1/0) equals one if a CEO is also the founder of the firm and zero otherwise.

CEO holdings (%) equals the number of shares held by the CEO divided by the total number of shares outstanding.

CEO cash compensation is the sum of a CEO's salary and bonus.

CEO equity compensation is total value of the restricted stock grants and the stock options grants (estimated using a modified Black-Scholes model) a CEO receives in a year.

CEO total compensation is the sum of a CEO's salary, bonus, value of restricted stock grants and stock options grants, long-term incentives payouts, and all other annual payments.

CEO abnormal total compensation is the residual from a compensation regression in which the dependent variable is the natural log of CEO total compensation and the independent variables include firm size (log market value of equity), the three-year cumulative stock return, ROA, book-to-market ratio, leverage, and industry and year fixed effects. This regression is estimated for all ExecuComp firms during the sample period.

CEO abnormal cash compensation is the residual from a compensation regression in which the dependent variable is the natural log of CEO cash compensation and the independent variables include firm size (log market value of equity), the three-year cumulative stock return, ROA, leverage, and industry and year fixed effects. This regression is estimated for all ExecuComp firms during the sample period.

CEO abnormal equity compensation is the residual from a compensation regression in which the dependent variable is the natural log of CEO equity compensation and the independent variables include firm size (log market value of equity), the three-year cumulative stock return, book-to-market ratio, leverage, and industry and year fixed effects. This regression is estimated for all ExecuComp firms during the sample period.

Coopted board (1/0) equals one if at least 50% of board members join the firms after the current CEO and zero otherwise.

Deal value/assets equals the deal value of an acquisition divided by the acquirer total assets.

E-index is the entrenchment index based on Bebchuk, Cohen, and Ferrell (2009).

Fraction attend < 75% meeting is the proportion of independent directors that attend less than 75% of board meetings.

Fraction of busy directors is the fraction of independent directors that hold three or more directorships in publicly firms.

Fraction of coopted independent directors is the fraction of independent directors that join the firm after the current CEO.

Fraction of independent directors equals the number of independent directors divided by the board size.

Fraction of intolerant (tolerant) directors in appointing firms' director network equals the number of intolerant (tolerant) directors that share at least one board with directors of appointing firms divided by the total number of directors that share at least one board with directors of appointing firms.

Independent director stock holdings equal the number of shares held by all independent directors divided by the total number of shares outstanding.

Independent nomination committee (1/0) equals one if all members of the nomination committee of a firm are independent directors.

Heckman self-selectivity is the inverse Mill's ratio from the Probit model in Panel C of Table 3.

Hostile (1/0) equals one if the takeover is a hostile deal.

Idiosyncratic risk (benchmark: industry) equals the annualized standard deviation of the residuals from a return regression estimated with daily returns during a firm's fiscal year where the independent variable is the average stock return in the industry, with industry defined by the Fama-French 48-industry classification.

Idiosyncratic risk (benchmark: market) equals the annualized standard deviation of the residuals from a return regression estimated with daily returns during a firm's fiscal year where the independent variable is the CRSP valued-weighted market return.

Independent block holder (1/0) equals one if the firm has at least one independent director who owns at least 5% of outstanding shares and zero otherwise.

Institutional holdings equals the fraction of the total shares outstanding held by institutions.

Leverage equals the book value of total debt divided by the market value of assets, where the market value of assets equals the book value of assets subtracted by the book value of equity plus the market value of equity.

Lock-up (1/0) equals one if the deal includes a lock-up agreement of target or acquirer shares.

Private target (1/0) equals one if the target is a private company.

Returns on assets (ROA) equals the income before extraordinary items divided by total assets.

Returns on equity (ROE) equals the income before extraordinary items divided by common equity.

Same industry (1/0) equals one if the acquirer and target firms belong to the same Fama-French 48 industry and zero otherwise.

Stock payment (%) is the proportion of acquisition payment made in stock.

Target termination fee (1/0) equals one if an acquisition includes a target-payable termination fee and zero otherwise.

Tender (1/0) equals one if the deal is a tender offer and zero otherwise.

Tobin's Q equals the market value of assets divided by the book value of assets, where the market value of assets equals the book value of assets subtracted by the book value of equity plus the market value of equity.

Table 1: Descriptive statistics

Panel A: CEO turnover firms and matched firms

The CEO turnover sample firm consists of 437 forced CEO turnovers during the period of 1996-2010. We follow the algorithm of Parrino (1997) to classify the forced turnovers. For each turnover firm, we identify a matching firm that does not experience a forced CEO turnover event and satisfy the following criteria: i) the matching firm belongs to the same Fama-French 48 industry as the turnover firm; ii) the matching firm has market capitalization between 50% and 200% of that of the turnover firm; iii) the matching firm does not experience a forced CEO turnover event during the 5-year period from year –2 to year +2 where year 0 is when the turnover firms fires its CEO; and iv) the matching firm has the closest three-year industry-adjusted stock return to that of the turnover firm. We define a director as an intolerant director if she is an outside director of the firm that fires their CEO. The outside directors of the matching firms are classified as tolerant directors. If a director sits on both a turnover firm board and a matching firm board, she is excluded from the analysis. Panel A reports size and performance of the turnover firms and matching firms. Panel B reports characteristics of intolerant directors and tolerant directors. In Panel B, "own firms" refer to the turnover firms in the first two columns and refer to the matching firms in the last two columns. In both panels, the t value of t-test (difference in means) and z value of Wilcoxon test (difference in medians) are reported in parenthesis. *, **, and *** denote statistical significance at the 10%, 5% and 1% level, respectively.

	(1) Turnover firms N = 437		(2) Matched firms N = 437		Difference (1) - (2)	
Variable	Mean	Median	Mean	Median	Mean	Median
Total assets ($ mil)	10,935	1,211	9,803	1,133	(0.42)	(-0.15)
Market capitalization ($ mil)	5,876	1,152	5,360	1,045	(0.50)	(-0.91)
3-year stock return	0.326	0.048	0.292	0.107	(0.49)	(0.80)
Industry adjusted 3-year stock return	-0.016	-0.158	-0.013	-0.131	(-0.06)	(0.58)
Stock return year t-1	0.066	-0.006	0.060	-0.014	(0.17)	(-0.26)
Industry adjusted stock return year t-1	0.034	-0.043	0.037	-0.010	(-0.12)	(1.04)
Market adjusted stock return year t-1	-0.026	-0.102	-0.015	-0.060	(-0.33)	(1.16)
ROA year t-1	0.077	0.070	0.085	0.083	(-0.91)	(-1.69)*
ROA industry adjusted year t-1	0.051	0.025	0.064	0.038	(-1.25)	(-1.75)*
ROE year t-1	0.060	0.087	0.037	0.108	(0.82)	(-0.49)
ROE industry adjusted year t-1	0.008	0.019	-0.009	0.026	(0.62)	(-0.15)

Panel B: Intolerant directors and tolerant directors

Variable	(1) Intolerant director N = 2,666		(2) Tolerant director N = 2,570		Difference (1) - (2)	
	Mean	Median	Mean	Median	Mean	Median
Age	59.98	61.00	60.17	61.00	(-0.79)	(-0.62)
Female (1/0)	0.13	0.00	0.11	0.00	(2.06)**	(2.05)**
Tenure at own firm (years)	6.45	5.00	7.40	6.00	(-5.82)***	(-6.74)***
Elected before CEO at own firm (1/0)	0.53	1.00	0.42	0.00	(7.97)***	(7.91)***
# Committee memberships at own firm	1.95	2.00	1.90	2.00	(1.30)	(1.02)
Audit committee memberships at own firm (1/0)	0.46	0.00	0.46	0.00	(-0.17)	(-0.17)
Compensation committee memberships at own firm (1/0)	0.46	0.00	0.45	0.00	(1.00)	(1.00)
Nomination committee memberships at own firm (1/0)	0.39	0.00	0.36	0.00	(1.87)*	(1.87)*
Governance committee memberships at own firm (1/0)	0.46	0.00	0.43	0.00	(1.79)*	(1.79)*
# Other board seats	0.98	1.00	0.91	0.00	(1.94)*	(2.15)**
CEO at other firms (1/0)	0.06	0.00	0.06	0.00	(-0.80)	(-0.80)
Average tenure at other firms (years)	6.29	5.00	6.26	5.00	(0.13)	(0.32)
# Committee memberships at other firms	1.26	0.00	1.25	0.00	(0.24)	(0.25)
Audit committee memberships at other firms (1/0)	0.22	0.00	0.23	0.00	(-0.45)	(-0.45)
Compensation committee memberships at other firms (1/0)	0.23	0.00	0.22	0.00	(1.33)	(1.33)
Nomination committee memberships at other firms (1/0)	0.21	0.00	0.20	0.00	(0.81)	(0.81)
Governance committee memberships at other firms (1/0)	0.23	0.00	0.22	0.00	(1.04)	(1.04)

Table 2: Which directors gain new board seats?

This table presents a logistic model where the dependent variable equals one if a director in our sample gains at least one new board seat after the turnover events. Director characteristics are measured at the time of CEO turnover events. All variables are defined in Appendix 1. Standard errors are clustered by directors. The t values are reported in parenthesis. *, **, and *** denote statistical significance at the 10%, 5% and 1% level, respectively.

	Dep. Var.: Dummy for gaining new board seats (1/0)
Intercept	-3.2795
	(-5.46)***
Intolerant director (1/0)	-0.0015
	(-0.28)
Intolerant director (1/0) * Leave turnover firm within 2 years after CEO turnover (1/0)	0.1318
	(0.26)
Intolerant director (1/0) * Positive CAR at CEO turnover (1/0)	0.0441
	(0.38)
Leave turnover (matching) firm within 2 years after CEO turnover date (1/0)	-0.6946
	(-2.99)***
Cumulative market adjusted stock return of turnover (matching) firm 2 years after CEO turnover	0.2310
	(1.67)*
Cumulative industry adjusted ROA of turnover (matching) firm 2 years after CEO turnover	0.0311
	(0.40)
Market capitalization of turnover (matching) firm (log)	0.1965
	(5.09)***
Director age	-0.0465
	(-8.32)***
Female (1/0)	0.2804
	(1.82)*
# Board seats	0.2798
	(4.32)***
CEO at other firms (1/0)	1.7066
	(10.77)***
Tenure (years)	-0.0550
	(-5.08)***
Audit committee memberships (1/0)	0.0239
	(0.20)
Compensation committee memberships (1/0)	0.0137
	(0.10)
Nomination committee memberships (1/0)	-0.0574
	(-0.42)
Governance committee memberships (1/0)	0.0402
	(0.13)
N	5,236
Pseudo R-sq	0.0957
Fixed effects (Industry)	Yes
Standard errors clustered by directors	Yes

Table 3: Board appointments of intolerant directors

For each intolerant and tolerant director, we search for all their future board appointments as outside directors during the period of 1996-2012 using the BoardEx databases. We also require data available from the Center for Research in Security Prices (CRSP), Compustat, Risk Metrics, and Execucomp databases. We identify 392 board appointments for the intolerant directors and 334 for the tolerant directors. Panel A reports the characteristics of the appointed directors at the time of new appointments. Panel B reports characteristics of the appointing firms measured at the fiscal year end preceding the announcement date of director appointment. Number of patents is the number of patents applied by the appointing firms during the five years prior to the appointments of 160 tolerance directors and 189 intolerance directors on or before 2006. The patent data from 1976 to 2006 is provided by National Bureau of Economic Research (NBER). In panels A and B, the t value of t-test (difference in means) and z value of Wilcoxon test (difference in medians) are reported in parenthesis. Panel C presents a Probit regression where the dependent variable equals one if a firms appoints an intolerant director and zero otherwise. We define a director as an intolerant director if she has previously fired a CEO at a different firm. Characteristics of the appointing firms are measured at the fiscal year end preceding the announcement date of director appointment. Industry and year fixed effects are included but not reported. Standard errors are clustered by directors. The t values are reported in parenthesis. All variables in three panels are defined in Appendix 1. *, **, and *** denote statistical significance at the 10%, 5% and 1% level, respectively.

Panel A: Characteristics of the appointed directors

	(1) Intolerant director N = 392		(2) Tolerant directors N = 334		Difference (1) - (2)	
	Mean	Median	Mean	Median	Mean	Median
Age	59.528	60.000	58.865	60.000	(1.28)	(1.18)
Female (1/0)	0.181	0.000	0.174	0.000	(0.26)	(0.26)
# Board seats	2.304	2.000	2.207	2.000	(0.89)	(0.37)
CEO of a public firm (1/0)	0.117	0.000	0.132	0.000	(-0.58)	(-0.59)
Average tenure of all directorships (years)	5.512	4.750	6.230	5.367	(-2.56)**	(-2.75)***
# Committee memberships	3.304	3.000	3.527	3.000	(-1.02)	(-1.18)
Audit committee memberships (1/0)	0.510	1.000	0.581	1.000	(-1.91)*	(-1.90)*
Compensation committee memberships (1/0)	0.579	1.000	0.608	1.000	(-0.78)	(-0.78)
Nomination committee memberships (1/0)	0.462	0.000	0.515	1.000	(-1.43)	(-1.43)
Governance committee memberships (1/0)	0.531	1.000	0.584	1.000	(-1.44)	(-1.44)
CAR(-1,+1) upon announcement of appointment	0.002	0.001	0.007	0.003	(-1.44)	(-0.57)

Panel B: Characteristics of the appointing firms

	(1) Intolerant director N = 392		(2) Tolerant directors N = 334		Difference (1) - (2)	
	Mean	Median	Mean	Median	Mean	Median
Market capitalization ($ mil)	21,673	4,590	22,983	5,453	(-0.78)	(-0.45)
Total assets ($ mil)	39,442	6,704	47,466	6,396	(-1.02)	(-0.57)
BM	0.489	0.422	0.493	0.453	(-0.16)	(-0.41)
Tobin's Q	1.818	1.448	1.786	1.435	(0.43)	(0.50)
Industry adjusted Tobin's Q	0.261	0.004	0.230	-0.011	(0.49)	(0.72)
Leverage	0.160	0.136	0.162	0.139	(-0.24)	(-0.21)
Cash/assets	0.131	0.083	0.130	0.081	(0.05)	(0.28)
R&D/assets	0.026	0.000	0.023	0.000	(0.97)	(1.41)
Idiosyncratic risk (benchmark: industry)	0.284	0.258	0.284	0.260	(0.16)	(0.08)
Idiosyncratic risk (benchmark: market)	0.287	0.262	0.287	0.258	(0.20)	(0.07)
Market adjusted stock return	0.005	-0.011	0.039	0.013	(-1.49)	(-1.48)
Industry adjusted stock return	0.002	-0.001	0.027	0.007	(-1.25)	(-1.19)
Industry adjusted ROA	0.017	0.003	0.013	0.000	(0.86)	(0.84)
Industry adjusted ROE	0.016	0.021	0.019	0.011	(-0.34)	(0.02)
Board size	10.244	10.000	10.368	10.000	(-0.68)	(-0.60)
Fraction of independent directors	0.757	0.786	0.774	0.800	(-1.85)*	(-1.75)*
Fraction of busy directors	0.346	0.333	0.348	0.333	(-0.12)	(-0.29)
Busy board (1/0)	0.214	0.000	0.211	0.000	(0.10)	(0.10)
Fraction of coopted independent directors	0.370	0.333	0.356	0.300	(0.55)	(0.64)
Coopted board (1/0)	0.317	0.000	0.293	0.000	(0.69)	(0.68)
Fraction attend < 75% meeting	0.006	0.000	0.007	0.000	(-0.50)	(-1.06)
Independent director stock holdings	0.004	0.001	0.004	0.001	(-0.18)	(1.10)
Independent nomination committee (1/0)	0.802	1.000	0.792	1.000	(0.30)	(-0.77)
# independent block holders (1/0)	0.014	0.000	0.026	0.000	(-0.89)	(-0.93)
Independent block holder (1/0)	0.011	0.000	0.020	0.000	(-0.91)	(-0.93)
Institutional holdings	0.722	0.744	0.728	0.742	(-0.44)	(-0.48)
CEO chairman (1/0)	0.507	1.000	0.457	0.000	(1.28)	(1.01)
CEO holdings	0.005	0.001	0.005	0.001	(0.52)	(0.99)
CEO founder (1/0)	0.044	0.000	0.033	0.000	(0.74)	(0.73)
CEO tenure (years)	6.050	5.000	5.834	5.000	(0.61)	(0.51)
E-index	2.332	2.000	2.026	2.000	(2.41)**	(2.43)**
CEO cash compensation ($ mil)	1.661	1.091	1.624	1.090	(0.35)	(0.19)
CEO equity compensation ($ mil)	4.546	2.820	4.638	3.065	(-0.26)	(-0.47)
CEO total compensation ($ mil)	7.920	5.625	7.856	5.877	(0.13)	(0.01)
CEO abnormal cash compensation ($ mil)	0.200	-1.043	0.079	-1.073	(0.33)	(0.15)
CEO abnormal equity compensation ($ mil)	0.031	-0.278	0.003	-0.173	(0.34)	(-0.52)
CEO abnormal total compensation ($ mil)	-0.434	-0.976	-0.370	-0.817	(-0.24)	(-0.49)
Real earnings management	0.050	0.038	0.042	0.043	(0.59)	(-0.73)
Accrual earnings management	0.002	0.003	0.003	0.003	(-0.19)	(-0.79)
Number of patents	259.7	3.000	171.9	5.000	(0.12)	(-0.59)

Panel C: Which firms appoint an intolerant director?

	Dep. Var.: Dummy for appointing an intolerant director (1/0)
Intercept	0.7322
	(0.02)
Percent of intolerant directors in directors' network	3.0484
	(2.12)**
Percent of tolerant directors in directors' network	-4.0350
	(-2.74)***
Market adjusted stock return	0.1460
	(0.90)
Industry adjusted ROA	0.2527
	(0.34)
Market capitalization (log)	-0.0292
	(-0.59)
BM (log)	-0.0063
	(-0.07)
Board size	0.0008
	(0.03)
Fraction of independent directors	-1.0051
	(-2.06)**
Busy board (1/0)	-0.0101
	(-0.08)
Independent director stock holdings	-0.9681
	(-0.13)
Independent block holder (1/0)	-0.5955
	(-0.84)
Coopted board (1/0)	0.1272
	(0.81)
CEO chairman (1/0)	0.2049
	(1.68)*
CEO holdings	-1.2144
	(-0.60)
CEO founder (1/0)	0.2444
	(0.80)
CEO age	0.0077
	(0.82)
CEO tenure	-0.0193
	(-1.25)
CEO abnormal total pay	-0.0080
	(-0.15)
E-index	0.0963
	(2.39)**
N	726
Pseudo R-sq	0.1862

Table 4: Director tolerance and subsequent forced CEO turnover

This table presents logistic models where the dependent variable equals one if a firm experiences a forced CEO turnover and zero otherwise. The sample consists of a panel of 2,042 firm/year observations of the 726 firms that appoint either an intolerant director or a tolerant director. For each of the 726 director appointments, we track the years subsequent to the director appointment for as long as the appointed director stays on the board. We define a director as an intolerant director if she has previously fired a CEO at a different firm. "Intolerant director" in Models (1) and (2) is a dummy variable equal to one if the appointed director is an intolerant director and zero otherwise. "Intolerant director" in Model (3) is the predicted probability of appointing an intolerant director estimated from Table 3, Panel C. Negative industry adjusted stock return is an indicator that equals one if a firm's daily compounded stock return in the previous three years is below the median stock return in the industry, with industry defined by the Fama-French 48-industry classification. All variables are defined in Appendix 1. Industry and year fixed effects are included but not reported. Standard errors are clustered by directors. The t values are reported in parenthesis. *, **, and *** denote statistical significance at the 10%, 5% and 1% level, respectively.

	Dep. Var.: Forced CEO turnover (1/0)		
	(1)	(2)	(3)
Intercept	-8.5796	-9.1772	-7.1876
	(-0.29)	(-0.31)	(-0.20)
Intolerant director	-0.0696	0.2906	-1.9184
	(-0.20)	(0.78)	(-1.82)*
Intolerant director * Negative three-year industry-adjusted stock return (1/0)	1.2774	1.1909	1.7886
	(2.88)***	(2.48)**	(3.36)***
Negative three-year industry-adjusted stock return (1/0)	-0.3556	-0.3898	0.4029
	(-1.03)	(-1.03)	(1.65)
Market capitalization (log)	0.0068	-0.0193	-0.0592
	(0.06)	(-0.17)	(-0.53)
BM (log)	0.3746	0.4094	0.2869
	(1.66)*	(1.63)	(1.13)
Board size	0.0501	0.0712	0.0830
	(0.85)	(1.06)	(1.22)
Fraction of independent directors	-0.9490	-1.0465	-1.1541
	(-0.96)	(-0.95)	(-1.01)
Busy board (1/0)	0.0090	-0.2172	-0.2383
	(0.04)	(-0.78)	(-0.84)
Independent director stock holdings	3.3895	0.6309	0.0184
	(0.45)	(0.07)	(0.00)
Independent block holder (1/0)	0.2689	0.1769	0.0732
	(0.30)	(0.18)	(0.08)
Coopted board (1/0)	0.7323	0.7827	0.7817
	(2.64)***	(2.68)***	(2.63)***
CEO chairman (1/0)	-0.4481	-0.4784	-0.5512
	(-1.78)*	(-1.80)*	(-2.05)**
CEO holdings	-12.2967	-14.0205	-14.9176
	(-2.06)**	(-2.26)**	(-2.36)**
CEO founder (1/0)	-1.6217	-2.0182	-1.8273
	(-1.38)	(-1.59)	(-1.45)
CEO age	0.0521	0.0489	0.0424
	(2.63)***	(2.23)**	(1.88)*
CEO tenure	0.0345	0.0558	0.0577
	(1.18)	(1.72)*	(1.77)*
CEO abnormal pay	-0.0818	-0.1289	-0.0857
	(-0.62)	(-0.92)	(-0.60)
E-index	0.1552	0.1759	0.1102
	(1.41)	(1.49)	(0.92)
Heckman self-selectivity		0.7658	
		(1.52)	
N	2042	2042	2042
Adj R-sq	0.1784	0.2020	0.1942

Table 5: Director tolerance and firm performance

For each of the 726 director appointments, we track the years subsequent to the director appointment for as long as the appointed director stays on the board. The sample in Panel A consists of a panel of 2,042 firm/year observations of the 726 firms that appoint either an intolerant director or a tolerant director. In Panel B, the sample reduces to 685 firm/year observations due to unavailable patent data after 2006. . All variables are defined in Appendix 1. "Intolerant director" in Models (1), (2), (4), (5), (7) and (8) is a dummy variable equal to one if the appointed director is an intolerant director and zero otherwise. "Intolerant director" in Models (3),(6), and (9) is the predicted probability of appointing an intolerant director estimated from Table 3, Panel C. Pre-appointment industry adjusted ROA and ROE are measured at the fiscal year end before the new director appointments. "Number of industry patents" equals the annual average number of patents in the industry of the appointing firms, with industries defined by the Fama-French 48-industry classification. Industry and year fixed effects are included but not reported. Standard errors are clustered by directors. The t values are reported in parenthesis. *, **, and *** denote statistical significance at the 10%, 5% and 1% level, respectively.

Panel A: Director tolerance in firms with high CEO entrenchment

	Dep. Var.: industry adjusted ROA			Dep. Var.: industry adjusted ROE			Dep. Var.: industry adjusted Tobin's Q		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Intercept	-0.003	0.048	0.023	-0.170	-0.133	-0.146	-0.054	-0.057	0.051
	(-0.15)	(2.11)**	(0.97)	(-2.11)**	(-1.59)	(-1.67)*	(-0.24)	(-0.24)	(0.23)
Intolerant director	-0.012	-0.005	-0.020	-0.038	-0.032	-0.075	0.000	-0.049	-0.429
	(-2.84)***	(-1.30)	(-1.56)	(-2.60)***	(-2.12)**	(-1.59)	(0.01)	(-1.06)	(-4.09)***
Intolerant director * Eindex	0.005	0.003	0.003	0.016	0.017	0.009	0.012	0.031	0.084
	(3.29)***	(1.97)**	(1.97)**	(2.85)***	(2.96)***	(1.97)**	(0.68)	(1.71)*	(2.09)**
Pre-appointment industry adjusted Tobin's Q							0.262	0.287	0.232
							(20.51)***	(19.76)***	(19.03)***
Pre-appointment industry adjusted ROA	0.364	0.406	0.445						
	(25.13)***	(24.98)***	(26.08)***						
Pre-appointment industry adjusted ROE				0.152	0.226	0.254			
				(8.04)***	(10.01)***	(10.45)***			
Market capitalization (log)	0.004	0.004	0.003	0.014	0.016	0.016	0.047	0.051	0.049
	(3.42)***	(3.22)***	(2.90)***	(3.15)***	(3.61)***	(3.59)***	(4.03)***	(4.20)***	(4.32)***
ROA year t-1							3.158	2.913	3.216
							(16.69)***	(14.32)***	(16.20)***
BM (log)	-0.056	-0.053	-0.050	-0.138	-0.117	-0.109			
	(-23.37)***	(-22.13)***	(-20.84)***	(-16.35)***	(-13.16)***	(-12.03)***			
Board size	-0.002	-0.004	-0.004	0.001	-0.003	-0.006	-0.033	-0.046	-0.036
	(-2.47)**	(-5.09)***	(-5.53)***	(0.24)	(-1.18)	(-2.02)**	(-4.60)***	(-5.89)***	(-4.95)***
Fraction of independent directors	-0.023	-0.044	-0.059	0.050	-0.015	-0.031	-0.210	-0.265	-0.375
	(-1.76)*	(-3.27)***	(-4.28)***	(1.07)	(-0.30)	(-0.60)	(-1.58)	(-1.82)*	(-2.86)***
Busy board (1/0)	-0.010	-0.007	-0.005	-0.008	0.004	0.010	-0.023	-0.011	-0.021
	(-3.69)***	(-2.53)**	(-1.71)*	(-0.76)	(0.39)	(0.98)	(-0.76)	(-0.35)	(-0.80)
Independent director stock holdings	-0.042	0.051	0.035	0.029	0.510	0.551	1.448	1.551	0.690
	(-0.25)	(0.32)	(0.23)	(0.05)	(0.88)	(0.95)	(0.86)	(0.94)	(0.24)

Panel A continued									
Independent block holder (1/0)	(0.11)	(-0.23)	(-0.63)	(-0.89)	(-1.67)*	(-2.00)**	(0.00)	(-0.18)	(0.55)
	-0.003	-0.002	0.004	-0.015	-0.008	0.003	0.054	0.059	0.037
Coopted board (1/0)	(-0.92)	(-0.59)	(1.25)	(-1.23)	(-0.68)	(0.25)	(1.52)	(1.58)	(1.09)
	0.001	0.001	0.002	0.013	0.013	0.012	-0.001	0.018	0.032
CEO chairman (1/0)	0.070	0.009	0.010	0.167	0.102	0.147	1.702	2.203	4.232
	(1.39)	(0.17)	(0.20)	(0.93)	(0.55)	(0.78)	(3.31)***	(4.04)***	(2.64)***
CEO holdings	-0.004	-0.012	-0.007	-0.037	-0.057	-0.063	-0.200	-0.167	-0.165
	(-0.54)	(-1.52)	(-0.83)	(-1.27)	(-1.98)**	(-2.12)**	(-2.46)**	(-2.05)**	(-2.36)**
CEO founder (1/0)	0.000	0.000	0.000	0.000	0.000	-0.001	-0.008	-0.006	-0.004
	(1.00)	(0.26)	(-0.21)	(-0.34)	(-0.18)	(-0.74)	(-3.70)***	(-2.37)**	(-1.81)*
CEO age	0.000	0.001	0.000	0.002	0.002	0.001	0.001	-0.004	0.000
	(1.27)	(1.67)*	(0.15)	(1.46)	(1.30)	(0.78)	(0.29)	(-0.87)	(-0.10)
CEO tenure	0.003	0.003	0.004	0.014	0.014	0.008	0.027	0.025	0.045
	(1.27)	(1.24)	(1.57)	(1.73)*	(1.67)*	(1.01)	(1.18)	(1.01)	(1.79)*
CEO abnormal total pay	-0.002	-0.003	-0.004	-0.014	-0.016	-0.010	-0.008	-0.030	-0.055
	(-1.20)	(-2.12)**	(-1.43)	(-2.48)**	(-2.77)***	(-0.97)	(-0.46)	(-1.71)*	(-2.19)**
E-index		-0.005			0.014			0.074	
		(-1.09)			(0.81)			(3.32)***	
Heckman self-selectivity	2042	2042	2042	2042	2042	2042	2042	2042	2042
	0.6326	0.6569	0.6044	0.3452	0.3713	0.3144	0.5254	0.5263	0.5252
N	2042	2042	2042	2042	2042	2042	(1)	(2)	(3)
Adj R-sq	0.5254	0.5263	0.5252	0.6326	0.6569	0.6044	-0.054	-0.057	0.051

Panel B: Director tolerance in firms in innovative industries

	Dep. Var.: industry adjusted ROA			Dep. Var.: industry adjusted ROE			Dep. Var.: industry adjusted Tobin's Q		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Intercept	-0.0385	-0.0274	0.0165	-0.0153	-0.0091	0.0242	0.6889	-0.5835	-0.0919
	(-1.02)	(-0.61)	(0.39)	(-0.38)	(-0.19)	(0.54)	(1.61)	(-1.22)	(-0.19)
Intolerant director	0.0092	0.0137	-0.0245	0.0076	0.0111	-0.0189	0.1867	0.0949	-0.3000
	(1.81)*	(2.38)**	(-1.37)	(1.38)	(1.79)*	(-0.99)	(3.24)***	(1.56)	(-1.53)
Intolerant director * Number of industry patents	-0.0006	-0.0004	-0.0019	-0.0005	-0.0002	-0.0020	-0.0104	-0.0147	-0.0148
	(-3.34)***	(-2.23)**	(-3.00)***	(-2.42)**	(-1.73)*	(-2.91)***	(-5.11)***	(-7.21)***	(-2.09)**
Number of industry patents	0.0007	0.0007	0.0014	0.0004	0.0002	0.0011	0.0106	0.0117	0.0108
	(4.11)***	(3.85)***	(4.07)***	(1.90)*	(1.14)	(2.95)***	(5.33)***	(6.14)***	(2.86)***
Pre-appointment industry adjusted Tobin's Q							0.3176	0.2359	0.2489
							(12.81)***	(9.13)***	(9.29)***
Pre-appointment industry adjusted ROA	0.5593	0.6208	0.6257						
	(22.31)***	(19.07)***	(19.56)***						
Pre-appointment industry adjusted ROE				0.5520	0.5844	0.5877			
				(19.57)***	(16.77)***	(17.29)***			
Market capitalization (log)	-0.0009	0.0018	0.0016	-0.0006	0.0023	0.0025	0.0367	0.1035	0.0860
	(-0.41)	(0.76)	(0.67)	(-0.23)	(0.89)	(0.99)	(1.48)	(4.06)***	(3.19)***
ROA year t-1							3.7265	3.9743	4.3619
							(12.61)***	(10.35)***	(10.88)***
BM (log)	-0.0465	-0.0413	-0.0423	-0.0525	-0.0459	-0.0452			
	(-9.71)***	(-7.28)***	(-7.60)***	(-10.03)***	(-7.48)***	(-7.54)***			
Board size	0.0019	-0.0018	-0.0017	0.0029	-0.0019	-0.0018	-0.0403	-0.0578	-0.0574
	(1.61)	(-1.36)	(-1.27)	(2.22)**	(-1.34)	(-1.28)	(-2.99)***	(-4.15)***	(-3.89)***
Fraction of independent directors	-0.0059	-0.0605	-0.0649	0.0032	-0.0390	-0.0458	-0.4343	-0.6280	-0.5560
	(-0.32)	(-2.87)***	(-3.09)***	(0.16)	(-1.73)*	(-2.05)**	(-2.13)**	(-2.91)***	(-2.43)**
Busy board (1/0)	-0.0017	-0.0019	-0.0019	-0.0033	-0.0063	-0.0069	0.0608	0.0766	0.1010
	(-0.35)	(-0.33)	(-0.33)	(-0.60)	(-1.01)	(-1.11)	(1.09)	(1.27)	(1.58)
Independent director stock holdings	0.1003	0.2266	0.3031	-0.1059	0.0131	0.0783	2.7025	7.0044	7.6399
	(0.37)	(0.84)	(1.14)	(-0.36)	(0.05)	(0.27)	(0.87)	(2.51)**	(2.61)***
Independent block holder (1/0)	-0.0025	-0.0220	-0.0265	0.0120	-0.0093	-0.0121	-0.1433	-0.4711	-0.5512
	(-0.11)	(-0.92)	(-1.12)	(0.46)	(-0.36)	(-0.48)	(-0.52)	(-1.89)*	(-2.11)**

Panel B continued									
Coopted board (1/0)	-0.0097	-0.0061	-0.0089	-0.0110	-0.0112	-0.0138	0.1485	0.0486	0.0381
	(-1.66)*	(-0.97)	(-1.43)	(-1.72)*	(-1.66)*	(-2.07)**	(2.21)**	(0.74)	(0.55)
CEO chairman (1/0)	-0.0167	-0.0106	-0.0074	-0.0114	-0.0075	-0.0046	-0.2016	-0.2740	-0.2420
	(-3.21)***	(-1.81)*	(-1.26)	(-2.00)**	(-1.19)	(-0.74)	(-3.48)***	(-4.54)***	(-3.77)***
CEO holdings	-0.1359	-0.1306	-0.1104	-0.1270	-0.0938	-0.0739	3.3680	3.6432	3.9965
	(-1.19)	(-1.14)	(-0.97)	(-1.01)	(-0.76)	(-0.61)	(2.58)***	(3.10)***	(3.20)***
CEO founder (1/0)	-0.0081	-0.0105	-0.0165	0.0055	-0.0202	-0.0221	-0.4077	-0.4179	-0.7160
	(-0.54)	(-0.62)	(-1.01)	(0.34)	(-1.12)	(-1.27)	(-2.36)**	(-2.40)**	(-3.97)***
CEO age	-0.0002	-0.0001	-0.0001	-0.0001	0.0000	-0.0001	-0.0145	-0.0073	-0.0063
	(-0.44)	(-0.15)	(-0.19)	(-0.27)	(-0.04)	(-0.13)	(-3.20)***	(-1.53)	(-1.23)
CEO tenure	0.0025	0.0020	0.0018	0.0017	0.0021	0.0020	-0.0030	0.0084	0.0051
	(3.59)***	(2.49)**	(2.31)**	(2.17)**	(2.50)**	(2.39)**	(-0.38)	(1.01)	(0.58)
CEO abnormal total pay	0.0053	0.0099	0.0105	0.0046	0.0088	0.0089	0.0763	0.0512	0.0718
	(1.66)*	(2.78)***	(3.00)***	(1.30)	(2.31)**	(2.39)**	(2.16)**	(1.41)	(1.87)*
E-index	-0.0004	-0.0032	-0.0028	0.0012	-0.0023	-0.0017	0.0250	-0.0051	-0.0066
	(-0.14)	(-1.06)	(-0.92)	(0.39)	(-0.71)	(-0.53)	(0.80)	(-0.16)	(-0.20)
Heckman self-selectivity		0.0287			0.0238			0.2374	
		(2.67)***			(2.07)**			(2.15)**	
N	685	685	685	685	685	685	685	685	685
Adj R-sq	0.6857	0.7013	0.6999	0.6408	0.7281	0.7320	0.7479	0.7711	0.7415

Table 6: Director tolerance and risk taking

The sample consists of a panel of 2,042 firm/year observations of the 726 firms that appoint either an intolerant director or a tolerant director. For each of the 726 director appointments, we keep the years subsequent to the director appointment as long as the appointed director stays on the board. All variables are defined in Appendix 1. "Intolerant director" in Models (1), (2), (4), (5), (7), and (8) is a dummy variable equal to one if the appointed director is an intolerant director and zero otherwise. "Intolerant director" in Models (3), (6), and (9) is the predicted probability of appointing an intolerant director estimated from Table 3, Panel C. Pre-appointment idiosyncratic risk and leverage of the appointing firm are measured in the year before the director appointments. Industry and year fixed effects are included but not reported. Standard errors are clustered at director level. The t values are reported in parenthesis. *, **, and *** denote statistical significance at the 10%, 5% and 1% level, respectively.

	Dep. Var.: Idiosyncratic Risk (Benchmark: industry)			Dep. Var.: Idiosyncratic Risk (Benchmark: market)			Dep. Var.: Leverage		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Intercept	0.4008	0.3391	0.3950	0.4176	0.3546	0.4120	0.0235	0.0348	-0.0006
	(10.98)***	(8.37)***	(10.24)***	(11.32)***	(8.68)***	(10.59)***	(0.77)	(1.00)	(-0.02)
Intolerant director	-0.0092	-0.0091	-0.0330	-0.0089	-0.0090	-0.0315	-0.0063	-0.0082	-0.0098
	(-1.92)*	(-1.74)*	(-2.00)**	(-1.85)*	(-1.71)*	(-1.89)*	(-1.82)*	(-2.04)**	(1.98)**
Pre-appointment idiosyncratic risk (benchmark: industry)	0.2346	0.2475	0.2556						
	(12.19)***	(11.79)***	(12.21)***						
Pre-appointment idiosyncratic risk (benchmark: market)				0.2283	0.2404	0.2489			
				(11.78)***	(11.40)***	(11.83)***			
Pre-appointment leverage							0.7046	0.7010	0.7106
							(42.28)***	(36.92)***	(40.31)***
ROA	-0.3346	-0.3058	-0.3069	-0.3446	-0.3139	-0.3136			
	(-9.58)***	(-8.07)***	(-7.80)***	(-9.78)***	(-8.24)***	(-7.91)***			
Cash							-0.0840	-0.0970	-0.0877
							(-5.68)***	(-5.76)***	(-5.54)***
Market capitalization (log)	-0.0132	-0.0128	-0.0160	-0.0142	-0.0137	-0.0170	0.0338	0.0327	0.0341
	(-6.24)***	(-5.82)***	(-7.37)***	(-6.65)***	(-6.15)***	(-7.76)***	(10.78)***	(9.35)***	(10.10)***
BM (log)	0.0101	0.0126	0.0119	0.0113	0.0134	0.0129	0.0008	0.0015	0.0017
	(2.11)**	(2.48)**	(2.38)**	(2.33)**	(2.63)***	(2.55)**	(0.52)	(0.85)	(1.00)
Board size	-0.0051	-0.0043	-0.0032	-0.0049	-0.0042	-0.0031	0.0011	0.0008	0.0012
	(-3.80)***	(-3.01)***	(-2.26)**	(-3.65)***	(-2.93)***	(-2.19)**	(1.14)	(0.75)	(1.13)
Fraction of independent directors	-0.0559	-0.0383	-0.0312	-0.0642	-0.0427	-0.0373	0.0583	0.0628	0.0580
	(-2.33)**	(-1.48)	(-1.22)	(-2.65)***	(-1.64)	(-1.45)	(3.27)***	(3.05)***	(2.95)***
Busy board (1/0)	-0.0064	-0.0091	-0.0049	-0.0076	-0.0100	-0.0062	0.0004	0.0004	0.0002
	(-1.20)	(-1.61)	(-0.92)	(-1.41)	(-1.76)*	(-1.15)	(0.11)	(0.09)	(0.06)

Table 6 continued

Independent director stock holdings	0.0249	0.0454	-0.4957	0.0480	0.0684	-0.5015	0.2066	0.0292	0.0468
	(0.14)	(0.26)	(-1.72)*	(0.27)	(0.39)	(-1.73)*	(0.94)	(0.13)	(0.21)
Independent block holder (1/0)	-0.0332	-0.0375	-0.0021	-0.0403	-0.0434	-0.0056	-0.0163	-0.0058	-0.0017
	(-1.36)	(-1.54)	(-0.08)	(-1.64)	(-1.77)*	(-0.22)	(-0.81)	(-0.28)	(-0.08)
Coopted board (1/0)	0.0006	0.0024	0.0016	0.0008	0.0021	0.0010	-0.0013	-0.0022	-0.0019
	(0.10)	(0.38)	(0.25)	(0.12)	(0.33)	(0.15)	(-0.28)	(-0.43)	(-0.39)
CEO chairman (1/0)	0.0023	0.0046	0.0002	0.0012	0.0033	-0.0012	-0.0024	-0.0026	-0.0033
	(0.46)	(0.87)	(0.04)	(0.23)	(0.62)	(-0.24)	(-0.65)	(-0.65)	(-0.84)
CEO holdings	-0.1238	-0.0148	-0.0227	-0.1520	-0.0383	-0.0522	-0.1492	-0.1823	-0.1866
	(-1.65)*	(-0.17)	(-0.25)	(-2.01)**	(-0.44)	(-0.56)	(-2.23)**	(-2.45)**	(-2.57)**
CEO founder (1/0)	0.0240	0.0296	0.0297	0.0272	0.0325	0.0334	0.0223	0.0234	0.0209
	(1.65)*	(1.98)**	(2.02)**	(1.86)*	(2.17)**	(2.25)**	(2.08)**	(1.99)**	(1.86)*
CEO age	-0.0004	-0.0001	-0.0005	-0.0004	-0.0001	-0.0005	-0.0004	-0.0006	-0.0004
	(-0.88)	(-0.12)	(-1.10)	(-0.88)	(-0.15)	(-1.13)	(-1.38)	(-1.80)*	(-1.18)
CEO tenure	0.0006	-0.0002	0.0001	0.0007	-0.0001	0.0002	0.0008	0.0011	0.0009
	(0.93)	(-0.29)	(0.18)	(1.10)	(-0.20)	(0.29)	(1.59)	(1.95)*	(1.72)*
CEO abnormal total pay	0.0081	0.0078	0.0065	0.0080	0.0081	0.0069	-0.0138	-0.0155	-0.0145
	(2.64)***	(2.46)**	(2.19)**	(2.59)***	(2.52)**	(2.30)**	(-4.68)***	(-4.61)***	(-4.52)***
E-index	-0.0032	-0.0024	-0.0025	-0.0036	-0.0030	-0.0031	-0.0021	-0.0018	-0.0009
	(-1.28)	(-0.93)	(-1.01)	(-1.46)	(-1.15)	(-1.24)	(-1.23)	(-0.93)	(-0.46)
Heckman self-selectivity		0.0139			0.0131			-0.0086	
		(1.50)			(1.40)			(-1.22)	
N	2042	2042	2042	2042	2042	2042	2042	2042	2042
Adj R-sq	0.5586	0.5578	0.5868	0.5585	0.5579	0.5868	0.7210	0.7291	0.7286

Table 7: Director tolerance and deal completion in acquisitions

This table presents logistic regressions where the dependent variable equals one if a merger is completed and zero otherwise. The sample consists of 326 mergers made by the firms that appoint either an intolerant director or a tolerant director and announced during the director's tenure at the appointing firm. We require the deal value to be at least $10 million. The bidder and target characteristics are measured for the fiscal year preceding the deal announcement. All variables are defined in Appendix 1. "Intolerant director" in Models (1) and (2) is a dummy variable equal to one if the appointed director is an intolerant director and zero otherwise. "Intolerant director" in Models (3) is the predicted probability of appointing an intolerant director estimated from Table 3, Panel C. Industry and year fixed effects are included. Standard errors are clustered by directors. The t values are reported in parenthesis. *, **, and *** denote statistical significance at the 10%, 5% and 1% level, respectively.

	Dep. Var.: M&A deal completion (1/0)		
	(1)	(2)	(3)
Intercept	34.744	66.380	37.717
	(4.48)***	(5.86)***	(1.48)
Intolerant director	-1.191	-10.896	-17.316
	(-1.08)	(-2.83)***	(-2.10)**
Intolerant director * Negative merger announcement CAR(-1,+1) (1/0)	-8.697	-6.856	-49.868
	(-4.14)***	(-1.90)*	(-4.34)***
Negative merger announcement CAR(-1,+1) (1/0)	5.529	7.769	23.538
	(4.69)***	(5.13)***	(3.73)***
Market capitalization (log)	-0.741	-3.166	-3.538
	(-1.67)*	(-6.80)***	(-3.40)***
BM (log)	10.937	12.468	12.151
	(6.73)***	(10.27)***	(6.88)***
Private target (1/0)	26.544	32.191	30.087
	(13.04)***	(9.46)***	(15.75)***
Hostile (1/0)	-6.589	-2.399	-7.968
	(-3.09)***	(-0.82)	(-3.07)***
Tender (1/0)	5.255	6.262	15.308
	(4.61)***	(4.97)***	(5.30)***
Same industry (1/0)	8.308	7.758	8.121
	(6.02)***	(3.42)***	(4.61)***
Cash payment (%)	0.180	0.216	0.245
	(7.83)***	(7.96)***	(10.56)***
Target termination fee (1/0)	10.564	8.951	13.218
	(8.84)***	(8.07)***	(12.80)***
Lock-up (1/0)	1.3034	-5.5232	-3.0775
	(11.80)***	(-1.02)	(-0.31)
Board size	-2.485	-1.491	-0.106
	(-7.99)***	(-4.24)***	(-0.20)
Fraction of independent directors	46.538	60.493	91.236
	(9.63)***	(8.78)***	(7.29)***
Busy board (1/0)	-1.232	0.922	-3.438
	(-1.42)	(0.56)	(-3.19)***
Independent director stock holdings	-2.811	-5.903	-13.342
	(-1.99)**	(-3.01)***	(-4.78)***
Independent block holder (1/0)	43.247	22.321	20.907
	(7.86)***	(1.70)*	(2.65)***
Coopted board (1/0)	7.854	4.401	11.340
	(5.65)***	(1.98)**	(4.86)***
CEO chairman (1/0)	8.983	7.083	9.377
	(6.74)***	(4.34)***	(3.28)***
CEO holdings	-464.900	50.786	44.062
	(-9.87)***	(0.30)	(0.72)
CEO founder (1/0)	18.912	-8.256	11.218
	(7.23)***	(-1.29)	(2.56)**
CEO age	-0.397	-0.561	-0.655
	(-4.93)***	(-4.93)***	(-4.53)***
CEO tenure	0.227	0.506	-0.317
	(1.41)	(2.46)**	(-1.08)
CEO abnormal total pay	-3.029	5.107	0.971
	(-5.08)***	(2.56)**	(0.93)
E-index	-4.945	-6.003	-5.862
	(-8.92)***	(-9.65)***	(-8.18)***
Heckman self-selectivity		-7.057	
		(-4.51)***	
N	326	326	326
Pseudo R-sq	0.3334	0.3255	0.3255

Table 8: Director tolerance and method of payment in M&A

This table presents logistic regressions where the dependent variable equals one if an acquisition is paid entirely with cash and zero otherwise. The sample consists of 326 acquisitions that are made by the firms that appoint either an intolerant director or a tolerant director and are announced during the director's tenure at the appointing firm. We require the deal value to be at least $10 million. The acquirer and target characteristics are measured at the fiscal year end preceding the merger announcement. All variables are defined in Appendix 1. "Intolerant director" in Models (1) and (2) is a dummy variable equal to one if the appointed director is an intolerant director and zero otherwise. "Intolerant director" in Model (3) is the predicted probability of appointing an intolerant director estimated from Table 3, Panel C. Industry and year fixed effects are included but not reported. Standard errors are clustered at director level. The t values are reported in parenthesis. *, **, and *** denote statistical significance at the 10%, 5% and 1% level, respectively.

	Dep. Var.: All cash payment (1/0)		
	(1)	(2)	(3)
Intercept	-8.185	-9.404	-9.206
	(-0.21)	(-0.24)	(-0.20)
Intolerant director	-1.115	-0.982	-3.755
	(-2.24)**	(-1.90)*	(-2.22)**
Market capitalization (log)	0.434	0.487	0.617
	(2.05)**	(2.21)**	(2.45)**
BM (log)	-1.267	-1.267	-1.504
	(-2.57)**	(-2.54)**	(-2.69)***
Leverage	-2.421	-1.605	-0.427
	(-0.93)	(-0.59)	(-0.14)
Private target (1/0)	-2.129	-2.115	-1.990
	(-4.33)***	(-4.31)***	(-3.57)***
Hostile (1/0)	-1.891	-1.862	-2.371
	(-1.10)	(-1.09)	(-1.13)
Tender (1/0)	0.918	0.944	0.861
	(1.72)*	(1.77)*	(1.33)
Same industry (1/0)	-0.072	0.022	-0.403
	(-0.18)	(0.05)	(-0.86)
Deal value/Assets	-7.144	-7.270	-5.656
	(-3.78)***	(-3.81)***	(-2.69)***
Lock-up (1/0)	-1.360	-1.379	-13.493
	(-1.16)	(-1.17)	(-0.03)
Board size	-0.222	-0.230	-0.283
	(-1.74)*	(-1.79)*	(-2.04)**
Fraction of independent directors	2.942	3.054	2.463
	(1.18)	(1.20)	(0.88)
Busy board (1/0)	0.293	0.353	0.423
	(0.70)	(0.83)	(0.88)
Fraction of independent director holdings	1.417	1.493	1.896
	(2.01)**	(2.10)**	(2.29)**
Independent block holder (1/0)	-0.480	-0.298	-1.360
	(-0.33)	(-0.20)	(-0.86)
Coopted board (1/0)	-0.673	-0.491	-0.647
	(-1.10)	(-0.78)	(-0.95)
CEO chairman (1/0)	-0.519	-0.420	-0.424
	(-1.00)	(-0.80)	(-0.72)
CEO holdings	-60.558	-56.054	-50.789
	(-1.92)*	(-1.80)*	(-1.64)
CEO founder (1/0)	0.738	0.727	0.850
	(0.47)	(0.46)	(0.54)
CEO age	0.013	0.017	-0.013
	(0.27)	(0.37)	(-0.06)
CEO tenure	0.041	0.024	0.033
	(0.57)	(0.33)	(0.40)
CEO abnormal total pay	0.090	0.056	0.145
	(0.30)	(0.18)	(0.44)
E-index	0.432	0.409	0.270
	(1.96)*	(1.86)*	(1.12)
Heckman self-selectivity		-0.561	
		(-1.17)	
N	326	326	326
Adj R-sq	0.6038	0.6070	0.6224

Table 9: Director tolerance and market reaction to acquisition announcements

The sample consists of 326 acquisitions made by the firms that appoint either an intolerant director or a tolerant director and announced during the director's tenure at the appointing firm. We require the deal value to be at least $10 million. Dependent variable is the three-day acquirer's cumulative abnormal returns (CARs) centered on the deal announcement date. CARs are estimated using the standard market model. The acquirer and target characteristics are measured at the fiscal year preceding the deal announcement. All variables are defined in Appendix 1. "Intolerant director" in Models (1) and (2) is equal to one if the appointed director is an intolerant director and zero otherwise. "Intolerant director" in Model (3) is the predicted probability of appointing an intolerant director estimated from Table 3, Panel C. Industry and year fixed effects are included but not reported. Standard errors are clustered at director level. The t values are reported in parenthesis. *, **, and *** denote statistical significance at the 10%, 5% and 1% level, respectively.

	Dep. Var.: CAR(-1,+1)		
	(1)	(2)	(3)
Intercept	0.0274	0.0427	0.0383
	(0.44)	(0.73)	(0.49)
Intolerant director	0.0139	0.0124	0.0121
	(2.25)**	(2.08)**	(2.11)**
Market capitalization (log)	-0.0051	-0.0063	-0.0053
	(-1.93)*	(-2.56)**	(-1.56)
BM (log)	-0.0039	-0.0058	-0.0047
	(-0.66)	(-0.98)	(-0.69)
Private target (1/0)	0.0085	0.0076	0.0145
	(1.32)	(1.22)	(2.10)**
Hostile (1/0)	-0.0371	-0.0389	-0.0410
	(-2.25)**	(-2.17)**	(-1.66)*
Tender (1/0)	0.0043	0.0028	0.0122
	(0.53)	(0.34)	(1.36)
Same industry (1/0)	-0.0061	-0.0070	-0.0067
	(-1.17)	(-1.37)	(-1.07)
Cash payment (%)	0.0000	0.0000	-0.0001
	(-0.55)	(-0.52)	(-1.09)
Deal value/Assets	-0.0679	-0.0690	-0.0794
	(-2.32)**	(-2.39)**	(-2.11)**
Board size	-0.0022	-0.0021	-0.0024
	(-1.40)	(-1.38)	(-1.13)
Fraction of independent directors	0.0854	0.0852	0.0924
	(2.55)**	(2.62)***	(2.29)**
Busy board (1/0)	0.0113	0.0090	0.0110
	(1.92)*	(1.55)	(1.54)
Independent director stock holdings	-0.0153	-0.0175	-0.0127
	(-1.52)	(-1.71)*	(-0.98)
Independent block holder (1/0)	0.0257	0.0226	0.0153
	(1.21)	(0.98)	(0.67)
Coopted board (1/0)	-0.0056	-0.0086	-0.0149
	(-0.65)	(-0.94)	(-1.47)
CEO chairman (1/0)	0.0074	0.0049	0.0057
	(1.15)	(0.74)	(0.67)
CEO holdings	-0.0780	-0.1042	0.2693
	(-0.23)	(-0.33)	(0.73)
CEO founder (1/0)	0.0261	0.0230	0.0086
	(1.94)*	(1.82)*	(0.61)
CEO age	0.0007	0.0006	0.0005
	(1.13)	(1.03)	(0.66)
CEO tenure	-0.0007	-0.0005	0.0002
	(-0.87)	(-0.61)	(0.18)
CEO abnormal total pay	-0.0013	-0.0001	-0.0017
	(-0.33)	(-0.02)	(-0.40)
E-index	-0.0062	-0.0055	-0.0057
	(-2.28)**	(-2.04)**	(-1.97)**
Heckman self-selectivity		0.0141	
		(2.39)**	
N	326	326	326
Adj R-sq	0.3412	0.3589	0.4070

Table 10: Director tolerance and forced CEO turnover after bad acquisitions

This table presents logistic regressions where the dependent variable equals one if the acquiring firm CEO is forced out within three years of the acquisition. The sample consists of 277 mergers that are completed by the firms that have previously appointed either an intolerant director or a tolerant director and are announced during the appointed director's tenure. The bidder characteristics are measured during the fiscal year preceding the deal announcement. All variables are defined in Appendix 1. "Intolerant director" in Models (1) and (2) is a dummy variable equal to one if the appointed director is an intolerant director and zero otherwise. "Intolerant director" in Model (3) is the predicted probability of appointing an intolerant director estimated from Table 3, Panel C. Industry and year fixed effects are included. Standard errors are clustered by directors. The t values are reported in parenthesis. *, **, and *** denote statistical significance at the 10%, 5% and 1% level, respectively.

	Dep. Var.: Forced CEO turnover after M&A (1/0)		
	(1)	(2)	(3)
Intercept	-19.7788	-22.0046	-10.8486
	(-0.46)	(-0.45)	(-0.21)
Intolerant director	0.4106	1.3558	0.6733
	(0.35)	(0.83)	(0.16)
Intolerant director * Negative merger announcement CAR(-1,+1) (1/0)	3.3673	4.0417	5.4119
	(2.23)**	(2.00)**	(1.84)*
Negative merger announcement CAR(-1,+1) (1/0)	-0.4930	-0.2734	-1.2128
	(-0.41)	(-0.19)	(-0.37)
Market capitalization (log)	-0.2771	-0.3375	-0.3761
	(-0.73)	(-0.75)	(-0.95)
BM (log)	-2.0241	-0.5042	-0.5196
	(-2.56)**	(-0.47)	(-0.56)
Board size	0.6039	0.8518	0.4133
	(1.93)*	(2.11)**	(1.47)
Fraction of independent directors	11.2796	16.8070	8.6000
	(2.18)**	(2.20)**	(1.50)
Busy board (1/0)	3.3519	3.2585	2.6508
	(3.47)***	(2.69)***	(2.59)***
Independent director stock holdings	1.5667	-0.1916	0.0071
	(1.21)	(-0.13)	(0.43)
Independent block holder (1/0)	-2.8253	0.9866	0.0605
	(-1.27)	(0.38)	(0.03)
Coopted board (1/0)	2.5362	3.0730	2.7551
	(2.02)**	(1.85)*	(2.05)**
CEO chairman (1/0)	-0.2005	-1.0685	-0.2814
	(-0.23)	(-0.92)	(-0.30)
CEO holdings	-0.4619	1.3470	0.4553
	(-0.81)	(1.51)	(0.51)
CEO founder (1/0)	-10.2594	-18.1170	-14.6784
	(-0.12)	(-0.58)	(-0.33)
CEO age	-0.0968	-0.1938	-0.1353
	(-1.00)	(-1.48)	(-1.11)
CEO tenure	-0.0601	0.0734	-0.0564
	(-0.42)	(0.32)	(-0.32)
CEO abnormal pay	0.0001	0.0002	0.0001
	(2.30)**	(2.51)**	(2.70)***
E-index	0.3112	0.5092	0.2029
	(1.22)	(1.34)	(0.63)
Stock payment (%)	0.0035	0.0073	0.0052
	(0.40)	(0.58)	(0.45)
Heckman self-selectivity		-0.4847	
		(-0.20)	
N	277	277	277
Adj R-sq	0.6826	0.6878	0.6211

Table 11: Director tolerance and earnings management

The sample consists of a panel of 2,042 firm/year observations of the 726 firms that appoint either an intolerant director or a tolerant director. For each of the 726 director appointments, we keep the years subsequent to the director appointment as long as the appointed director stays on the board. All variables are defined in Appendix 1. "Intolerant director" in Models (1), (2), (4), and (5) is a dummy variable equal to one if the appointed director is an intolerant director and zero otherwise. "Intolerant director" in Models (3) and (6) is the predicted probability of appointing an intolerant director estimated from Table 3, Panel C. Pre-appointment real and accrual-based earnings management are measured at the fiscal year end before the new director appointments. Industry and year fixed effects are included but not reported. Standard errors are clustered at director level. The t values are reported in parenthesis. *, **, and *** denote statistical significance at the 10%, 5% and 1% level, respectively.

	Dep. Var.: Accrual Earnings Management			Dep. Var.: Real Earnings Management		
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	-0.0019	0.0002	-0.0146	0.1697	0.1711	0.1948
	(-0.06)	(0.01)	(-0.39)	(2.48)**	(2.49)**	(2.53)**
Intolerant director	0.0057	0.0031	0.0184	-0.0023	-0.0026	0.0240
	(1.43)	(0.71)	(1.14)	(-0.23)	(-0.25)	(0.69)
Intolerant director * Negative industry adjusted ROA at year t-1 (1/0)	-0.0021	0.0017	-0.0227	0.0386	0.0387	0.0979
	(-0.34)	(0.27)	(-1.13)	(2.51)**	(2.51)**	(2.19)**
Negative industry adjusted ROA at year t-1 (1/0)	-0.0007	-0.0026	0.0117	-0.0039	-0.0039	-0.0347
	(-0.15)	(-0.52)	(1.04)	(-0.33)	(-0.32)	(-1.35)
Pre-appointment accrual-based earnings management	0.0477	0.0343	0.0416			
	(2.20)**	(1.47)	(1.66)*			
Pre-appointment real earnings management				0.1509	0.1500	0.2090
				(7.34)***	(7.22)***	(8.53)***
Market capitalization (log)	0.0002	0.0003	0.0009	-0.0056	-0.0057	-0.0038
	(0.10)	(0.16)	(0.53)	(-1.55)	(-1.57)	(-0.97)
BM (log)	0.0005	0.0026	0.0020	-0.0248	-0.0249	-0.0226
	(0.13)	(0.66)	(0.51)	(-3.51)***	(-3.52)***	(-2.89)***
Board size	-0.0002	-0.0003	-0.0003	0.0024	0.0024	0.0003
	(-0.15)	(-0.26)	(-0.25)	(1.09)	(1.09)	(0.11)
Fraction of independent directors	0.0026	0.0059	0.0019	-0.1482	-0.1489	-0.1173
	(0.14)	(0.30)	(0.09)	(-3.99)***	(-4.00)***	(-2.79)***
Busy board (1/0)	-0.0028	-0.0002	0.0006	0.0051	0.0049	0.0016
	(-0.75)	(-0.05)	(0.15)	(0.60)	(0.59)	(0.18)
Independent director stock holdings	-0.2253	-0.2584	-0.1806	-0.3563	-0.3572	-0.2997
	(-0.76)	(-0.84)	(-0.58)	(-1.34)	(-1.35)	(-1.10)
Independent block holder (1/0)	0.0062	0.0073	0.0056	0.0787	0.0787	0.0874
	(0.30)	(0.34)	(0.26)	(1.72)*	(1.72)*	(1.86)*
Coopted board (1/0)	-0.0011	-0.0021	-0.0032	0.0295	0.0295	0.0254
	(-0.22)	(-0.41)	(-0.61)	(2.86)***	(2.86)***	(2.26)**
CEO chairman (1/0)	0.0041	0.0059	0.0063	-0.0142	-0.0145	-0.0224
	(1.16)	(1.66)*	(1.71)*	(-1.71)*	(-1.74)*	(-2.47)**
CEO holdings	-0.0696	-0.0576	-0.0741	0.2387	0.2348	0.2459
	(-1.13)	(-0.75)	(-1.00)	(1.31)	(1.29)	(1.31)
CEO founder (1/0)	0.0063	0.0082	0.0027	0.0342	0.0338	0.0373
	(0.68)	(0.74)	(0.27)	(1.41)	(1.39)	(1.40)
CEO age	0.0003	0.0002	0.0001	-0.0002	-0.0002	-0.0008
	(1.04)	(0.48)	(0.30)	(-0.27)	(-0.28)	(-0.97)
CEO tenure	0.0000	0.0001	0.0002	-0.0039	-0.0039	-0.0042
	(-0.08)	(0.21)	(0.33)	(-3.63)***	(-3.60)***	(-3.49)***
CEO abnormal total pay	0.0004	0.0004	0.0006	0.0043	0.0042	0.0065
	(0.17)	(0.16)	(0.25)	(0.87)	(0.85)	(1.22)
E-index	0.0008	-0.0002	-0.0003	-0.0077	-0.0076	-0.0092
	(0.53)	(-0.12)	(-0.15)	(-1.96)*	(-1.92)*	(-2.08)**
Heckman self-selectivity		0.0045			0.0024	
		(0.55)			(0.29)	
N	2042	2042	2042	2042	2042	2042
Pseudo R-sq	0.1276	0.1216	0.1223	0.2793	0.2793	0.2898