# Preoccupied Independent Directors[*]

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## Abstract

Busy independent directors are not constantly "busy" and "independent" all the time and in all firms they serve for. To reflect this, I identify the actual time periods that a firm's independent directors are preoccupied by serious external circumstances. These external circumstances include severe health issues, national awards (for outside activities) and major distractions from more important positions at unaffiliated firms where the director concurrently serves, such as major illness or turnover of the CEO or other director on the same committee, firm underperformance, financial misconduct investigations, financial distress and large acquisitions and divestitures. On average 22% of independent directors are identified to be preoccupied each year. Using difference-in-difference and matching and after controlling for number of directorships, I find that these directors have lower meeting attendance and more frequently relinquish less prestigious directorships, conditional on poor firm performance. Firms with a higher proportion of preoccupied independent directors tend to have lower firm value and worse M&A performance. These firm-level negative effects are stronger when the preoccupied independent directors have important monitoring responsibilities.

Keywords: Corporate Governance, Board of Directors, Busy Directors, Independent Directors

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Busy independent directors are not constantly "busy" and "independent" all the time and in all firms they serve for. To reflect this, I identify the actual time periods that a firm's independent directors are preoccupied by serious external circumstances. These external circumstances include severe health issues, national awards (for outside activities) and major distractions from more important positions at unaffiliated firms where the director concurrently serves, such as major illness or turnover of the CEO or other director on the same committee, firm underperformance, financial misconduct investigations, financial distress and large acquisitions and divestitures. On average 22% of independent directors are identified to be preoccupied each year. Using difference-in-difference and matching and after controlling for number of directorships, I find that these directors have lower meeting attendance and more frequently relinquish less prestigious directorships, conditional on poor firm performance. Firms with a higher proportion of preoccupied independent directors tend to have lower firm value and worse M&A performance. These firm-level negative effects are stronger when the preoccupied independent directors have important monitoring responsibilities.

# 1    Introduction

Having a director with multiple directorships can be viewed as both good and bad for a firm. Some studies find that multiple directorships reflect greater director talents, which can be beneficial for the firm under certain circumstances (Gilson, 1990; Kaplan and Reishus, 1990; Shivdasani and Yermack, 1999; Chidambaran et al., 2011; Masulis and Mobbs, 2011, 2014). However, such directors can also be busy, which is associated with negative firm outcomes (Ferris et al., 2003; Fich and Shivdasani, 2006).[1] Furthermore, these directors with multiple directorships are unlikely to allocate their time and energy equally across their directorships. For example, Masulis and Mobbs (2014) find that an independent director with multiple directorships tends to allocate more time to their directorships at larger firms, who then benefit at the expense of smaller firms where the director also serves. More importantly, busy independent directors are not constantly "busy", but instead face major distractions under specific circumstances that are generally of limited duration. Thus, this study aims to identify a group of truly busy independent directors that is largely free from endogeneity, while taking into account the occurrence and relative importance of external activities.

The key to my experimental design is to identify major distractions, which are exogenously induced, that make independent directors much busier and as a result reduce their monitoring activities at the firm. These distractions can directly affect the independent director (i.e., major illnesses or recipient of a major national award), or be the result of major events occurring at another S&P 1500 firm where the independent director serves on the board at same time. Potential distractions that occur at other firms include illness or turnover of the CEO or director on the same committee, firm underperformance, financial misconduct investigations, financial distress and M&A activity. These are all events that can potentially distract directors when they

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[1] At the time this paper is written, Falato et al. (2014) is the most recent paper on busy directors. It identifies the sudden deaths of directors and CEOs as an exogenous shock to the degree of busyness of interlocked directors. It uses difference-in-difference analysis, and defines the treatment (control) group to be interlocked firms whose independent directors also have (do not have) committee interlocks with the deceased director. It finds a significant negative market reaction for interlocked firms in the treatment group, but no reaction for those in the control group.

occur at other firms where an independent director concurrently serves.[2] Although personal health issues and national awards are likely to reduce an independent director's commitment to the firm, the impacts on an independent director's monitoring activity of these distractions depends on the relative importance of these other directorships to the independent director.[3] That is, when major distractions occur to another directorship, an independent director may reallocate more time to these firms if they are important, or relinquish the positions if they are less important. I take this into account by requiring the directorships at other firms to be relatively more important, so that a significant amount of director attention flows from the current firm to the troubled firm.[4] I define a directorship to be more important if (1) the other firm is larger in size; (2) the independent director serves as an executive director at the other firm or (3) the independent director is on a committee that is directly affected by a distracting event. For each distraction, I collect its beginning and ending dates and generate an indicator of a preoccupied independent director based on the time overlap of the distraction period and the firm's fiscal year. The section of this paper describing Capturing Preoccupied Directors provides details about the definitions, selection criteria, along with a justification for including each type of distraction. I insure that only external events that are likely to absorb independent director attention are considered.

The choice of distractions must be events that are arguably exogenous. Personal health of independent directors is largely independent of firm performance. When it comes to the sickness of CEOs, I only consider CEOs at other unaffiliated firms, which again is exogenous to the current firm. Also, I only consider overall winners of national awards in defining this form of distraction, which maintains its exogeneity relative to the current firm where the winner serves as an independent director. The rationale for this restriction is that a national award is unlikely to be

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[2] Admittedly, there are other exogenous events that require directors' attention but are never publically disclosed. Such examples include divorces, deaths and long illness of vital family members. These unexamined cases are indeed relatively rare. McCoy and Aamodt (2010) find that the divorce rate (defined as the population of separated and divorced couples scaled by the difference between total population and those that have never married) of chief executives is 9.81%, which is almost half of the national average of 16.35%. Also, to the extent that SEC requires disclose of all material events, the unreported ones tend to be less significant.

[3] The impact of having distracted independent directors on the current firm also varies with the role of the distracted independent director in the current firm. I examine this in regression analysis and show the incremental firm-level consequences when the distracted independent directors are long-tenured (who are likely to be good monitors before being distracted because they are less likely to be co-opted by the CEO).

[4] The results would be weaker both economically and statistically if I include distraction from less important firms.

made for being a diligent independent director. Rather, it would be associated with the individual's primary role at his or her main employer or other influential outside activities. That is, it is more likely that the award-winning director becomes the winner because of achievements in more vital roles, for example, being an outstanding CEO at another firm. More importantly, events occurring at other independent firms are largely independent of the current firm because the two firms cannot be major competitors by law. The Clayton Antitrust Act 1914 prohibits a director from sitting on the boards of two competing firms at the same time because it creates conflicts of interests. I also make sure the distractive events considered in my sample are not from a major customer/supplier of the firm in question. Including events that occur at other firms concurrently also has the benefit of maximizing the identification of preoccupied independent directors. Throughout the paper, the words "preoccupied" and "distracted" are used interchangeably.

I hypothesize that becoming preoccupied leads to less commitment at the director level, and hence more negative outcomes at the firm level, especially if the preoccupied independent director plays an important role at the current firm. Masulis and Mobbs (2014) provide evidence that directors with multiple directorships prioritize their attention on prestigious boards with larger firms. The occurrence of distracting events reduces the relative importance of the current firm. Thus, the director's time and effort at the current firm is likely to be reduced, which is transferred to outside concerns associated with distraction. Because the independent director cannot afford as much time as before in acquiring information about the firm, he/she has to rely more on insiders to provide firm information that is used in monitoring. In other words, the independent directors become less independent when becoming preoccupied. Hence, I expect less effective monitoring outcomes at the firm-level. More importantly, different independent directors are unlikely to be equally important for a firm. For example, co-opted independent directors appointed after the CEO accepts the position are unlikely to be active monitors, even when not distracted (Coles et al., 2014). Thus, the more reliant a firm is on independent director monitoring, the more severe are the effects the firm suffers once the director becomes distracted. Following this intuition, firms may suffer more when non-coopted independent directors are distracted.

My sample is drawn from S&P 1500 firms over the 2000–2013 period. Information on director illness is hand collected from Factiva, LexisNexis, SEC 8-K filings, company websites and Google search. I also collect national awards conferred by the following publications, organizations and politicians: Business Week, Chief Executive, Forbes, Industry Week, Morningstar.com, Time, Time/CNN, Ernst & Young, Harvard Business Review, Business 2.0 and the President of the United States. The key criterion for inclusion is that the award is national (or worldwide), so that anyone can potentially win it (i.e., no restriction on industry, age, etc). This ensures that only influential awards are selected. I use BoardEx as the primary source of director information. Because it reports director independence as stated by the companies, I also exclude interlocking directors from being classified as independent directors. An independent director is considered to be preoccupied if he/she is distracted for a significant period during the fiscal year. On average, 1,485 (22.08%) of independent directors are preoccupied each year. It is important to note that although distraction is a temporary condition for a single director, firms tend to have continuous periods when one or more different directors are preoccupied. For director-level analysis of independent directors, I exclude financial and utility firms. This leaves 93,671 independent director-firm-years. I further exclude dual class firms and firms with a controlling shareholder, leaving 12,524 firm-years for my firm-level empirical analysis.

I use both OLS and difference-in-difference estimations in empirical analysis. This analysis provides clear inference about causation because a firm cannot predict whether, when and for how long its independent directors will become distracted. And by definition, distraction may occur at a different time to the same director again. Idiosyncratic shocks from distractions have the advantage of being reoccurring and reversible. This is particularly useful in mitigating concerns about violation of the parallel trends assumption. With director-level difference-in-difference analysis, a treatment director is an independent director who is not preoccupied in year *t-1* but becomes preoccupied in year *t*. And control directors are the remaining independent directors who are not preoccupied in both years on the same board with treatment directors. Both treatment and control directors must have constant number of directorships during the two years, and the number of directorships held by a control director must not differ from a treatment director in the same firm-year by more than 1. In performing firm-level difference-in-difference analysis, the treatment firms are those with distracted independent directors in year *t* but not in

years *t-3* to *t-1*. Control firms do not have a distracted independent director throughout the 4 years. They are matched with replacement to the treatment firms by industry and average number of directorships of independent directors.

I find evidence that preoccupied independent directors are less effective monitors. At the director level, I find that preoccupied independent directors have higher absence levels at board meetings and a higher frequency of relinquishing a relatively less prestigious directorship. These findings provide evidence that distractive events are a strong shock to directors' attention, and suggest the firm may suffer from having preoccupied independent directors. Hypothesizing that preoccupied independent directors are less effective monitors, I then analyze the impacts at the firm level of representation of independent directors who are not preoccupied as well as representation of independent directors who are preoccupied. I find that a higher proportion of preoccupied independent directors (or a lower proportion of independent directors who are not preoccupied) leads to lower firm value and poorer M&A performance. I find the negative effects of having preoccupied independent directors on the board are stronger when these directors are non-coopted with the CEO. The difference-in-difference analysis confirms these findings.

This study makes the following contributions. First, I identify a group of independent directors (i.e., preoccupied independent directors) who are truly distracted and unable to monitor effectively. My empirical design reflects the dynamic nature of busyness and independence, and takes into account the relative priority a director assigns to a directorship. My measure recognizes that directors with more directorships have a higher chance of being distracted, while capturing the actual occurrence of the distraction directly.

Second, my study contribute to the literature on the link between director independence and information cost. Existing literature has found that when firm-level information cost is high, director independence is hurtful because outside directors have to rely on insiders to provide information for monitoring (Duchin et al., 2010). In my study, the occurrence of a major distraction serves as a shock to the cost of information production by a particular director. When a director is distracted, the information cost for this director increases because he/she now has to

rely more on information provided by insiders due to a lack of time. I find this reduction in independence leads to negative consequences at the firm level.

Third, my results also contribute to the literature on superstar CEOs. Malmendier and Tate (2009) find that CEOs winning prestigious business awards tend to underperform afterwards, while they spend more time on activities outside their firms (e.g., writing books). I expand prestigious awards to national awards not necessarily related to business, because they also reflect the outside actions and contributions of award winner. My finding of such directors also receiving more directorships afterwards is consistent with Malmendier and Tate (2009). In fact, the distraction effect does not have to be limited to cases of winnings awards. My study also takes into account that major negative corporate outcomes and decisions as well as personal events can all be distracting.

Fourth, my study provides an example of constructing a key independent variable based on idiosyncratic exogenous shocks. These idiosyncratic shocks (i.e., distractions) have the advantage of being reversible and reoccurring, unlike shocks such as law changes which are commonly used. This property is particularly useful in ruling out experimental pitfalls associated with parallel trends in treatment and control directors and firms (i.e., directors and firms affected and not affected by a distraction). Further, these idiosyncratic shocks may occur to any director at any firm, leading to as many as 22% of independent directors at S&P 1500 firms experiencing such shocks (i.e., preoccupied). The benefit of obtaining a handful of preoccupied directors is not just a larger sample for analysis and application. More importantly, it allows me to perform more detailed tests to better understand the mechanism of how distraction impacts the director and the firm.

This leads to the last contribution that my study recognizes the degree of distraction for the director and the firm, as well as the roles of the distracted independent director can all matter from the perspective of the subsequent consequences for the firm. To make sure a director is truly preoccupied in a fiscal year, I require the occurrence of distraction to affect him/her significantly. That is, it is not just the occurrence of events that matters, the relative importance of the events to the independent director as well as the persistence of these events that must also

matter. I take these into account by requiring that the distraction is relatively important for a director and the distraction period encompasses a majority of the fiscal year. The large sample of preoccupied independent directors also enables me to show that the higher the fraction of independent directors that are preoccupied (and the lower the fraction of directors that are independent and not preoccupied), the more severely the firm suffers. In addition, independent directors with more important monitoring roles (such as non-coopted independent directors) cause more severe firm level consequences on becoming preoccupied. Hence, I have found that not only the existence of preoccupied directors matters, but their voice on the board (as reflected by the relative number of these directors as well as their role in monitoring) also matters.

## 2      Capturing Preoccupied Directors

An independent director is considered to be preoccupied if s/he is distracted by important events of a lengthy duration. There are two major types of distractions that I analyze. The first type directly affects the independent director. This includes an independent director becoming sick or receiving a prestigious national award. I only consider the overall winner of a national award, rather than all winners so that the directors become famous (and hence, preoccupied) afterwards. Restricting the analysis to national winners also maintains exogeneity, because a person is unlikely to be rewarded with such influential awards for accomplishments as an independent director, but rather for more important external activities. Appendix B shows that directors winning national awards tend to hold more directorships afterwards, which is consistent with Malmendier and Tate (2009). I hand collect director sickness information from Factiva, LexisNexis, SEC 8-K filings, company websites and Google search.[5] I collect national awards conferred by the following publications, organizations and politicians: Business Week, Chief Executive, Forbes, Industry Week, Morningstar.com, Time, Time/CNN, Ernst & Young, Harvard Business Review, Business 2.0 and the President. All awards are at the national or global level, and I only select overall winners to ensure that these awards are sufficiently influential.  Appendix C lists all the awards, most of which are studied by Malmendier and Tate (2009).

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[5] I collect health concerns of all directors, and then match and extrapolate them within BoardEx universe. Inferring independent directors' health issues from their other more important positions (e.g., as the CEO in another firm) is necessary because health issues of independent directors are rarely reported.

The second type of distraction occurs at other S&P 1500 firms where the director also serves on the board at the same time. These include firm underperformance, financial misconduct investigations, financial distress, restructuring activity, CEO turnover and CEO illness. Underperformance is defined as lower industry-adjusted annual performance of ROA or stock return than the prior year. Public revelation of financial misconduct where an investigation is likely is presumed given coverage in the Federal Securities Database analyzed by Karpoff et al. (2013). Financial distress is defined to include credit ratings downgrades, Chapter 11 filings[6] and delisting (due to price below an acceptable level, having insufficient capital, surplus, and/or equity, having insufficient (or non-compliance with rules of) float or assets, filing delinquencies and delays, non-payment of fees, or not otherwise meeting exchange's financial guidelines for continued listing).[7] Restructuring events, including M&As and divestitures, are considered potentially distracting for the directors of buying (selling) firms if the transaction size is at least 10% of the buyer (seller) market equity value. All restructuring events regardless of deal size are considered potentially distracting regardless for the directors in sold subsidiaries. I include all CEO turnovers regardless of the nature of the turnover, because all turnovers require substantial additional effort by directors. These events are chosen because they each tend to affect a firm significantly, which is the first condition for an independent director to be distracted.

A second required condition for this to be a serious distraction is that the directorships to which these events occur must be more valuable to the independent director than the directorship with the firm in question, or the director is personally responsible for the event. Thus, I require the other firm is larger in size than the current firm, the independent director is an executive director at the other firm, or the director serves on (1) the nomination committee in case of CEO illness and CEO turnover, (2) the audit committee in case of the revelation of financial misconduct or (3) the investment committee in case of restructuring events. Also, illness and turnover of independent directors at other firms can be distracting, if the directors both serve on the same

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[6] This data is sourced from UCLA-LoPucki Bankruptcy Research Database. I intentionally exclude filings of Chapter 7, where firms stop all operations and go completely out of business. Directors essentially give up the firm when Chapter 7 is filed, so it cannot constitute a distraction.

[7] I intentionally exclude delisting due to liquidation/insolvency/bankruptcy because if the firm's management are still trying to revive the firm, it would already be covered in Chapter 11 filling; if the firm's management has given up (such as in a liquidation), then there won't be any distraction.

nomination or compensation committee[8] in other firms and committee size decreases after a director turnover. Appendix D provides a summary of definitions and sources of all distractive events.

A director is considered to be preoccupied for the year if (s)he is distracted for at least 50% (or 25% if distracted by illness) of the days in the fiscal year.[9] To ensure accuracy when measuring distraction length, I use beginning and ending dates, rather than the year in identifying distraction periods and performing matching. Where not mentioned in the report, I define the beginning date of an illness to be the earliest date when the illness is publicly revealed. If neither death nor illness recovery is available, I assume the illness ends in 330 days.[10] Malmendier and Tate (2009) find that firm ROA decreases continuously over years (0, +2), where year 0 is the year of CEO receiving an award. This suggests the award-winning CEO can be distracted for up to two years. So I assume distraction due to awards starts on the announcement of the awards, and finishes 730 days later. The beginning and ending dates of firm underperformance, turnover and financial distress are defined by the beginning and ending dates of the fiscal year within which the event occurs, respectively. I assume that directors become engaged in an SEC investigation 7 days before the earliest of inquiry date, investigation date, violation ending date, trigger date, restatement date and regulatory proceedings beginning date, because directors are usually consulted briefly before any formal record (Fons et al., 2014). The ending date of engagement with SEC investigation is the regulatory proceedings ending date. When it comes to M&As and divestitures, I assume directors of the buying firm become busy one year (6 months) prior to the initial M&A announcement date until 1.5 years (1 year) after the completion date for a (non-) diversifying M&A deal, and directors of the selling firm become busy 6 months prior to the initial bid announcement until deal completion. This definition of attention periods reflects the

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[8] Compensation and nomination committees are considered to be more time-consuming than other committees (Committee on Corporate Laws, 2007). Hence, once one committee member stops working other members' workload would significantly increase (as long as the non-working member is not replaced by a new member).

[9] 25% instead of 50% is required when it comes to illness, because the distraction impact of illness can be longer and more severe. For example, after recovery from illness a person is likely to be more careful about health afterwards). Also, a director is likely to have been ill for some time before publicly disclosing it.

[10] The threshold of 330 days is set based on the graphing of directors' board participation and time elapsed after becoming ill in Appendix D. The graph shows that directors' board participation starts recovering about 230 days after initial disclosure of illness, and reaches its initial level upon disclosure in about 330 days.

average time taken for acquisitions including the subsequent integration, and takes into account that non-diversifying bids are more time-consuming than diversifying bids (Bell, 2016).

The occurrence of director distractions is arguably exogenous. Personal health of independent directors is largely independent of firm performance. It is possible that the CEO's health is correlated with firm performance, but I only consider sickness of CEOs at other firms, which is still exogenous of the current firm's performance. Further, directors are unlikely to receive national awards for their role as an independent director. Rather, they are more likely to receive a national award for their external activities (e.g., being the CEO at another firm). Thus, such independent director awards should also be exogenous to the current firm. Being distracted by major concerns at other firms is also exogenous because the current firm cannot determine what happens at these other firms. It follows that the current firm cannot anticipate when the shock is coming, and once it starts whether and when it will end. The Clayton Antitrust Act 1914 prohibits a director from sitting on the boards of rival firms because it creates conflicts of interests.[11] I also eliminate distraction occurring at major customer/supplier firms, because major customer/supplier firms could directly impact the firm in question through their strong economic links. I source material customer/supplier relationships from Compustat Customer Segment data, which report public customers that account for at least 10% of a public firm.[12] I find that eliminating distraction from major customer/supplier firms only reduce the proportion of preoccupied independent directors by 1% (from 23.08% to 22.08%). This suggests that although the law does not explicitly identify sitting on the boards of customer/supplier firms as a scenario of conflicts of interests, directors tend large firms tend to be very careful in avoiding conflicts of interests of any form probably because of the heavy personal punishment associated with it. To conclude, the distracting shocks hitting the current firm and its directors are byproducts of events outside the current firm. Hence, the resulted consequences at firm and director levels are isolated impacts of director busyness, especially after incorporating control variables, fixed effects, matching and DID setting in the analysis (see the Empirical Design section).

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[11] See https://www.law.cornell.edu/uscode/text/15/19 for details.

[12] Compustat does not provide GVKEY of the customer firms and provide their company names instead. I thank Jared Stanfield for merging my sample of all distraction pairs with the customer-supplier sample that he has linked with GVKEY from 2000 to 2009. I match the post-2009 data by company name with Compustat universe to identify GVKEY of customer firms. I thank Robert Tumarkin for sharing his name matching algorithms in Ruby and Haskell.

# 3    Empirical Design

My distraction variables are essentially based on idiosyncratic shocks that are exogenous and thus random to the firm being studied. Thus, OLS estimation allows me to identify the effect of distraction with minimal endogeneity concerns (Atanasov and Black, 2015). Because controls should not be affected by the key independent variable when the latter is exogenous (Angrist and Pischke, 2008), I use lagged controls. However, the impact of distraction is immediate and may be quickly reversed once the distraction stops. I therefore keep the key independent variables of distraction contemporaneous. Using a contemporaneous key independent variable should not heighten endogeneity concerns, given that the key independent variable is arguably exogenous.[13]

I also implement DID analysis with matching. The idiosyncratic exogenous shocks (i.e., distraction) in my sample are reoccurring and reversible in nature, which is particularly useful in mitigating concerns about violation of parallel trends assumption. A treatment director is identified as an independent director who is distracted for at least 50% (or 25% if distracted by illness) of the firm-year, but not in the prior year within the same. The control directors are the remaining independent directors on the board of the treatment directors, who are not distracted in both years. Both treatment and control directors must have constant number of directorships during the two years, and the number of directorships held by a control director must do not differ with a treatment director in the same firm-year by more than 1. At the firm level, the treatment firms have one or more distracted independent directors (i.e., treatment directors from the director level difference-in-difference analysis) in the current year, but not in the prior 3 year. Control firms do not have a treatment director throughout the 4 years. They are matched with replacement to the treatment firms by 5% radius of average number of directorships of independent directors and Fama-French 48 industry. The data include observations in years $t - 1$, $t$ and $t + 1$, where year $t$ is the treatment year. The procedure of matching better makes sure the likelihood of being treated is similar between treatment and control groups.

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[13] For robustness, I also perform all regressions with two alternative settings. The first one is to lag all right-hand-side variables, including the key independent variable. The second is to only lag controls for performance (i.e., ROA & Tobin's Q). I find that the coefficient of key independent variable is not affected much by either setting in terms of statistical significance.

The impact of preoccupied independent directors at firm-level is likely to vary with the roles of the directors. The more important the preoccupied independent directors are to the firm, the more severely the firm would suffer when these directors are preoccupied. One type of independent directors that are particularly responsible for monitoring is non-coopted independent directors, whose tenures are longer than the current CEO (Coles et al., 2014; Dou et al., 2015). In order to examine the role that relative tenure plays in affecting the firm-level consequences of having preoccupied independent directors, I split one key independent variable in a regression into two. That is, I fit two key independent variables, namely the fraction of independent directors that are preoccupied and non-coopted as well as the fraction of independent directors that are preoccupied and co-coopted (or, the fraction of directors that are independent, non-preoccupied and non-coopted and the fraction of directors that are independent, non-preoccupied and coopted), in the same regression. I then compare coefficients of the two key independent variables in the same regression. For the sample of DID analysis, I define two treatment groups. One has non-coopted distracted independent directors and the other has coopted distracted independent directors. It is important to note that the two treatment groups are not mutually exclusive, because a treatment firm could have both non-coopted and non-coopted treatment directors. I then interact indicators of each group with the post-treatment indicator in the same regression and compare the two interaction terms.

In regressions where the dependent variable is binary or is restricted within a certain range, I use OLS regressions if the model includes industry*year fixed effects or firm and year fixed effects. This is because using non-linear specifications with a large number of fixed effects gives rise to incidental parameters problems, which bias the coefficients and standard errors (Greene, 2004; Arellano et al., 2006). Furthermore, Angrist (2001) and Angrist and Pischke (2008) (pp103) point out that while non-linear models may provide a better fit, the marginal effects and t-statistics calculated using OLS are sufficiently accurate. Throughout the paper, industry fixed effects are based on the Fama-French 48 industry classification, which is generated based on historical SIC codes.

# 4 Sample Data and Summary Statistics

I use BoardEx as the primary source of director information. BoardEx reports director independence as stated by companies. I further take interlocking directors into account and treat them as being non-independent. I consider two directors to be interlocking if they are inside directors who sit on each other's board in the same year within the BoardEx universe.[14] Approximately 0.8% of directors are classified as interlocking directors, and 1.2% of independent directors fall into the interlocking independent director category and therefore, are reclassified as grey rather than independent directors.

In order to obtain directors' meeting attendance records, I match RiskMetrics to BoardEx by firm and director name for firm-director-years covered in BoardEx. BoardEx data is sourced from annual reports, which are backward-looking (i.e., a director is supposed to be there from $Annual\_Report\_Year_{t-1}$ to $Annual\_Report\_Year_t$), while RiskMetrics data is collected from proxy filings which are forward-looking (i.e., a director is supposed to be there from $Meeting\_date_t$ to $Meeting\_date_{t+1}$). I take this timing difference into account when matching. I also use matching algorithms that take into account possibility of misspelling, wrong name order, nick names, omissions (of middle name, for example), and similar issues.[15] To ensure accuracy of matches, I also compare CUSIP and director birth year and manually pick good matches.[16] I

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[14] RiskMetrics provides an "interlock" indicator and its definition of interlocks include: executive officers serving as directors on each other's compensation or similar committees (or, in the absence of such a committee, on the board); or executive officers sitting on each other's boards and at least one serves on the other's compensation or similar committees (or, in the absence of such a committee, on the board). I do not use this measure from RiskMetrics because it only identifies a small group of interlocking independent directors, especially that my sample universe is from BoardEx and not all directors in BoardEx are matched with RiskMetrics. I do not use RiskMetrics as the main database for director information due to its inaccuracy in director identifier. The identification of pre-occupied independent directors largely depend on the events occur to other firms that the same director serves for at the same time. Hence, it is particularly important that I have a clean director identifier.

[15] See the online appendix of Sen and Tumarkin (2015) for a detailed discussion of the matching procedures.

[16] Comparing director birth year of potential matches ensures that cases where the father and the son share the same name and company (i.e., same company name and director name but birth years differ by at least 20 years) are not matched, and cases where the same director changes the surname are matched (e.g., Susan L Purkrabek-Knust and Susan L Knust who share the same company and birth year) are matched. Directors changing name over time is not a problem also because BoardEx provides an accurate director identifier. After extrapolating my matches using the director identifier, the same firm-directors that are matched once are also matched in their other forms in the dataset. Where company names differ but director names seem to be referring to the same person, I manually search on Edgar to see if one company name is the former company name of the other.

then match BoardEx with Compustat and CRSP, using CIK, ISIN (from which CUSIP is extracted) and company names.[17]

My sample is limited to S&P 1500 firms from 2000 to 2013. There are two main reasons for restricting the sample to S&P 1500 firms. First, it maintains exogeneity of distractive events occurring at other firms that the independent director concurrently serves for. Because large firms can be easily observed by regulators, directors of large firms are especially likely to be cautious with Clayton Antitrust Act 1914 and avoid any situations that could lead to conflict of interests by sitting on two boards. Second, it better identifies underperformance of a firm which is one type of distractive events I consider. Because underperformance is defined as lower industry-adjusted performance, the sample of firms used in computing industry averages matters. Intuitively, when a firm evaluates its performance, it is likely to compare itself to peer firms (i.e., S&P1500 firms are more likely to compare themselves with other S&P 1500 firms, rather than all firms). Thus, computing industry averages within S&P 1500 firms helps with identifying underperformance more accurately. Table 1 presents the number (Panel A) and proportion (Panel B) of independent directors who are preoccupied due to each type of the distraction for fiscal years 2000 to 2013. Taking all distractive events into account, 1,485 (22.08%) of independent directors are preoccupied every year on average.

For director-level analysis of independent directors, I exclude financial and utility firms. This leaves 93,671 independent director-firm-years. Table 2 Panel A reports summary statistics of key variables at the director level. Only 2.4% attend less than 75% of board meetings. The mean (median) number of directorships is 1.9 (2). This variable is generated by counting the number of directorships of a director within S&P1500 universe. I do not consider all directorships because positions at smaller firms are likely to be much less important (i.e., non-S&P1500) and therefore are unlikely to affect a director's commitment to the board of an S&P1500 firm. The mean (median) age is 61.5 (62). The mean (median) board tenure for independent directors is 7.6 (6) years. The average independent director owns 0.3% of the firm's outstanding shares. Almost all

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[17] In matching databases, I distinguish header code (e.g., CUSIP and permno) from historical code (e.g., NCUSIP and lpermno) and use Eventus to convert the latter to the former where necessary.

independent directors are members of at least one major committee (i.e., audit, nomination or compensation), with a mean (median) of 0.9 (1).

For firm-level empirical analysis, I further exclude dual class firms and firms with a dominant insider shareholder. The motivation for these criteria is that independent directors in such organizations have less influence due to the special governance characteristics of these firms. The director-level analysis does not exclude such firms because a person can still be distracted and therefore be less devoted, regardless of what kinds of firms s/he works for. That is, independent directors of these firms could be bad monitors compared to those in others firms, but it does not mean they cannot become worse (compared to compared to themselves) when they are further distracted. The final firm-level sample contains 12,524 firm-years. Table 2 Panel B reports summary statistics of key variables at the firm level. On average, 20.4% of independent directors on a board are preoccupied, and 59.6% of directors on a board are independent and not preoccupied. An average board has 9 directors. An average firm controls 7.160 billion in total assets.

# 5    Director-Level Analysis

I start my analysis at director level to find out whether and how differently preoccupied independent directors behave.

## 5.1    Board Meeting Absence

I use a director's board meeting attendance record to infer his or her commitment to the firm, and source this information from RiskMetrics. Table 3 presents regression results from independent director-firm-year level data. The dependent variable is one if the director attended less than 75% of the meetings for the year and zero otherwise. Standard errors are robust and clustered by director. In all models, the indicator for being a distracted director is positive and significant at the 1% level, suggesting that a preoccupied independent director attends fewer meetings. The coefficient on the number of directorships is also positively significant, although with a smaller magnitude.

The signs of other control variables are as expected. Directors who are older, serve in the post-SOX period, serve for larger firms or are members of major board committees (i.e., nomination, compensation audit and corporate governance) have fewer absences. Directors on larger boards or serving for firms with higher value (as measured by Tobin's Q) have more absences. The coefficients of share ownership and operating performance are both insignificant.

Incremental compensation and number of meetings per years may also affect meeting attendance. I thus collect annual director retainer, meeting attendance fees and the number of meetings from Execucomp and append them to Models 4-6 as firm-level controls. This information is only available until 2006 and is not reported by all firms even before 2006. As a result, the number of observations drops dramatically and the coefficients of these variables lack significance. However, the coefficients of all three variables are negative which is consistent with literature (e.g., Masulis and Mobbs, 2014).[18]

I find that higher incremental compensation in the forms of annual director retainer and meeting attendance fees create a stronger motivation for better meeting attendance. Admittedly, the interpretation of the negative coefficient of between number of meetings and meeting absence is not straightforward. Relative to industry peers (i.e., in models with industry and year fixed effects or industry*year fixed effects), having more meetings suggest more rigorous internal governance mechanism. The independent directors of these better governed firms may attend more meetings, either because they are better monitors chosen by such firms or because the firm culture of rigorous monitoring encourages them to do so. In models with firm and year fixed effects, a firm raising number of meetings per year suggests a firm that is going through a significant transition or is experiencing a period of underperformance. This could place some added pressure on directors to attend more meetings.

Table 4 presents difference-in-difference estimates of absences at board meetings for independent directors experiencing a major distraction. The definitions for treatment and control

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[18] In unreported results, I also include controls for firm complexity including CAPEX, leverage, and number of business segments and the fraction of tangible assets. The intuition is that directors at more complex firms may have to spend more effort (e.g., by attending more meetings). However, the coefficients of these variables tend to be insignificant. My results seem to suggest that how a director distributes his/her attention across multiple firms depends on highly varying performance characteristics, rather than the relatively less volatile firm characteristics.

directors are provided in the Empirical Design section. The treatment indicator variable equals one for treatment director-years and zero for control director-years. The post-treatment indicator variable is zero in the year prior to being distracted and one in the year of distraction. The interaction of these two variables represents the effect of a director being distracted on independent director attendance. The controls in Models 1-3 are the same as Model 1 of Table 3, and the controls in Models 4-6 are the same as Model 4 of Table 3. All controls are suppressed for brevity. The models also include fixed effects, and standard errors are robust and clustered by director. The coefficient of the interaction term is positive and significant mostly at the 5% level in all models, which is consistent with the expectation that a preoccupied director would be less committed to the firm and more frequently absent from board meetings.

## 5.2    Relinquished Directorships

Table 5 presents a regression analysis of the likelihood of independent director departure, conditioning on whether they are preoccupied, firm performance and other variables that may affect a departure decision. The dependent variable is defined as one if the director steps down as a director in the next year. Firm performance is measured by annual stock returns and returns on assets (ROA).[19] The key explanatory variables are the interactions of the distraction indicator and firm performance measures. Standard errors are robust and clustered by director. Models 1-3 and Models 4-6 measure firm performance by annual stock returns and ROA, respectively. The coefficients of both measures are negative and significant in all the models, consistent with the notion that a director is likely to relinquish a directorship with poor firm performance. The coefficient of the interaction term of firm performance and independent director distraction is negative and significant at the 1% level, where performance is measured by annual stock returns. In comparison, the coefficient of the interaction term of ROA and director distraction is also negative, but less significant. Overall, these results imply that preoccupied independent directors are more willing to relinquish directorships, especially when firm performance is poor. This reallocation of director time and attention can have significant impact on board decisions and firm actions, which in turn will affect shareholder value.

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[19] In unreported results, I find similar results when using industry-adjusted ROA or market-adjusted annual stock return.

The estimated coefficients of the control variables have their expected signs. Directors who are older, have more directorships, longer board tenure, higher stock ownership or serve on boards of larger firms are more likely to not continue their directorships. Directors in larger firms or serving in the post-SOX period are less likely to depart. The coefficient of board independence is also negative, although insignificant.

Table 6 presents difference-in-difference estimates of forgoing directorships for independent directors experiencing a major distraction, conditioning on firm performance. The treatment and control groups are defined as before, as are the treatment and post-treatment indicator variables. The interaction of a treatment director, the post-treatment period and firm performance represents the effect of being distracted on independent director actions, conditional on firm performance. The coefficient of this interaction term with annual stock returns is negative and significant at the 5% level, and is negative and significant at the 10% level for ROA. These results suggest that preoccupied independent directors are more likely to relinquish a board seat when the firm underperforms. The positive coefficient estimate for the post-shock indicator reveals a positive time trend in the likelihood of independent directors in both the treatment and control groups leaving the board in the near future. The controls in Table 6 are the same as those in Table 5, and they are suppressed for brevity. Models 1 and 3, Models 2 and 4 and Models 3 and 6 include fixed effects of industry and year, industry*year and firm and year respectively, and all models report robust standard errors clustered by director.

Thus far, the evidence indicates that independent directors tend to devote less time and energy to a directorship when they are preoccupied. At the firm level, this phenomenon is expected to manifest itself in poorer firm performance, lower firm value and other negative firm-level consequences. I consider these implications in the next section.

# 6    Firm-Level Analysis

In this section, I aggregate up independent director distractions to the board level and analyze the impact of the fraction of independent directors that are preoccupied as well as the fraction of directors that are independent and not preoccupied. I exclude financial and utility firms which are highly regulated, as well as dual class firms and firms with a dominant insider shareholder

because their special governance characteristics constrain the influence of their independent directors.

## 6.1 Firm Performance and Value

Table 7 reports estimates from regressions on firm performance and firm value. Each regression has either firm and year fixed effects (Models 1, 3, 4 and 6) or industry*year fixed effects (Models 2 and 5) as indicated and all the standard errors are robust and clustered by firm. Whilst firm and year fixed effects captures unobservable firm level factors, the inclusion of industry*year fixed effects makes unobservable variations within the same industry-year (such as industry downturns) to be less of a concern. I measure firm performance by ROA, and firm value by the natural logarithm of Tobin's Q.[20] These dependent variables are not adjusted by industry mean nor median, following Gormley and Matsa (2014). I control for the fraction of independent directors that hold 3 or more directorships, as well as other controls that are often associated with firm value and performance in the existing literature (e.g. Anderson and Reeb, 2003; Fich and Shivdasani, 2006; Coles et al., 2008; Masulis and Mobbs, 2014).

Models 1 and 4 use the fraction of directors who are independent and undistracted as the key explanatory variable. The coefficients of the key independent variable from both Models 1 (ROA) and 4 (Q) are positive and significant, indicating that the more independent directors who are likely to be good monitors, the better is firm value and performance. According to Table 2 Panel B, boards have nine directors on average. Thus, if one independent director becomes distracted, this is equivalent to an 11% fall in the fraction of directors who are independent and undistracted. The coefficient estimate in Model 1 (4) implies that a decrease of one independent, non-distracted director is associated with a 0.286% (2.035%) decline in ROA (Tobin's Q).[21] Models 2, 3, 5 and 6 present results using the fraction of independent directors as the key explanatory variable, which is negative and significant at the 1% level in all these models. Although the distraction of one director may quickly reverse itself, a firm can have different directors distracted over consecutive years. Thus, I can still observe an average effect that for firms having one preoccupied director over consecutive years (although caused by different directors at

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[20] We use logs to adjust for outliers. However, all the models in Table 7 are robust to not using logs.
[21] An independent director changing from distracted to non-distracted equates to (0.026 x 0.11) = 0.00286 higher ROA level, and (0.185 x 0.11) = 0.02035 increase in Tobin's Q.

different times, each contributing a limited period of distraction), the decline in average monitoring efforts can imply a serious deterioration in firm governance, leading to a significant fall in a firm's ROA and Tobin's Q.

Following the Empirical Design section, I next analyze the role of relative tenure. Table 8 presents the results. Comparing the coefficients of two key independent variables in the same regression informs me of potential differences in the impact of preoccupied directors when they are non-coopted vs coopted. The coefficient of the independent variable with non-coopted directors is stronger both economically and statistically than that with co-opted directors in the same regression. Independent directors with relatively longer tenure than the CEO tend to be better monitors than those with relatively shorter tenure (Coles et al., 2014; Dou et al., 2015), possibly because of their greater independence or their greater experience at the firm. Thus, having preoccupied and non-coopted independent directors is more detrimental to a firm than having preoccupied but co-opted independent directors, and having independent, non-preoccupied and non-coopted directors is more beneficial to a firm than having independent, non-preoccupied but coopted directors.

Table 9 - Table 10 report on the findings from my firm-level difference-in-difference analysis. The treatment firms are those with distracted independent directors in the current year, but not in the prior 3 years. Control firms do not have a distracted independent director throughout the 4 years. They are matched with replacement to the treatment firms by 5% radius of average number of directorships of independent directors and Fama-French 48. I require treatment events to be at least 3 years apart from each other to sure that the results are not contaminated by prior treatment events due to their lagged effects. Also, because the impact of treatment may not translate in to firm performance and value immediately, I include observations in years $t-1, t$ as well as $t+1$ in the data, where year $t$ is the treatment year. In Table 10, I classify all treatment firms into two groups that are not mutually exclusive. The two treatment groups consist of treatment firms with preoccupied independent directors that are non-coopted and coopted, respectively.

The controls used in Table 9 - Table 10 are the same as those used in models 1 and 7 of Table 7 for ROA and Ln(Tobin's Q), respectively, but are suppressed for brevity. The coefficient of the interaction term between treatment firm and post-treatment period indicators represents the effect of having preoccupied independent directors on firm performance and firm value. In Table 9, this coefficient is negative and significant in all models, confirming that distraction lowers director monitoring, which in turn lowers firm performance and firm value. The coefficient estimate for the treatment indicator is insignificant in all models of both tables, which indicates that treatment firms do not significantly differ from control firms in terms of firm performance and value prior to the shock, which is consistent with the parallel trends assumption. In Table 10, the coefficients of $TreatNC \times Post$ are more significant than those of $TreatC \times Post$ in all models. This confirms the finding in Table 8 that firm value and performance suffers more from non-coopted independent directors being preoccupied.

## 6.2    Acquisition Announcement Returns

If preoccupied independent directors are too busy to monitor, it is likely that they will not review potential M&As transactions proposed by executives carefully and thus, the acquisitions that are approved may not necessarily be profitable. Therefore, I next examine the relationship between director distraction and acquisition performance. For an acquisition to be included in the M&A announcement returns analysis, I require that the deal is completed; the acquirer controls less than 50% of the target's shares prior to the announcement and owns 100% of the target's shares after the transaction; and the deal is larger than $1 million and at least 1% of the acquirer's equity capitalization, as measured on the eleventh trading day prior to the announcement date (as in Masulis et al., 2007). I further exclude internal restructuring transactions where the ultimate buyer and seller are the same firm, and deals that are announced within (-2, +2) trading day window of earnings releases and other major firm news.[22] Finally, I exclude transactions made by non-S&P 1500 firms, financial and utility firms, dual class firms and firms with a dominant insider shareholder.  These criteria leave a sample of 2,659 acquisitions.

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[22] I track releases of other major firm information through SEC filings of 8-K (current event), 10-K (annual financials), 10-Q (quarterly financials), Form 3 (insider report), Form 4 (insider buy/sell) and Form 5 (year-end insider report). Acquisitions that are announced within +/-2 days of filing of 8-K reports are excluded if the reports contain news other than the acquisitions. Acquisitions that are announced within +/-2 days of filing of all other reports are also excluded, because other reports are limited to firm financials, insiders and insider trading.

The sample for M&A analysis is at the deal level. In evaluating acquisition performance, I conduct an event-study which uses cumulative abnormal returns (CAR) for the event window $(-1, 1)$ trading days around the acquisition announcement date. Table 11 and Table 12 report the results. In both tables, the key independent variables are constructed based on rolling windows within the last 365 days prior to the acquisition announcement. In Table 11, Models 1-3 use the fraction of directors that are independent and non-distracted as the key independent variable, and the coefficient of this variable is positive and significant at a 10% level. Models 4-6 use the fraction of independent directors who are distracted as the key independent variable, and its coefficients are all negative insignificant to marginally insignificant

The results so far suggest that preoccupied independent directors provide fewer advisory benefits to their board since their presence tends to lead to lower quality acquisitions. Table 12 conducts further analysis to test the impact of co-option of preoccupied independent directors. The coefficients of the key independent variables with non-coopted directors are more significant than those with co-opted directors. These results support the conclusion that relatively longer-tenured independent directors have a more important role in the M&A process and thus, having one of them distracted makes a more negative impact on M&A performance.

In terms of control variables, bidder firm size is negatively related to acquisition announcement returns, *CAR*. The percentage of cash used is negatively related to *CAR*. Non-diversifying deals generally yield higher bidders *CARs*, although the relationship is insignificant. I also control for board independence, which is an indicator variable that equals 1 if more than 50% of directors are independent and is 0 otherwise. Similar to Masulis et al. (2007), but contrary to Byrd and Hickman (1992), I find that board independence does not significantly affect acquisition quality.

# 7    Conclusion

To conclude, I have identified a new group of independent directors, which I term preoccupied independent directors, who are truly busy and cannot monitor effectively. Apart from independent director illnesses and national awards, I utilize events occurring at other firms where the same independent director contemporaneously serves to determine whether and when an

independent director is preoccupied. My empirical design reflects the dynamic nature of director busyness and independence, and it takes into account the relative priority a director assigns to a directorship.

I find that preoccupied independent directors have higher meeting absence and a higher likelihood of relinquishing a relatively less prestigious directorship. At the firm level, having a higher proportion of preoccupied independent directors (or a lower proportion of directors who are independent but not preoccupied) causes lower firm value and worse M&A performance. I find that the negative effects of having preoccupied independent directors on the board are stronger when these directors are un-coopted. My results could also help explain why superstar-CEOs underperform after winning awards. It could be because they are pushed to participate in more outside activities and duties and consequently have less time to spend on company affairs thereafter.

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**Table 1 Year Distribution of Preoccupied Independent Directors**
This table presents year distribution of independent directors being distracted by each and all distracting events for fiscal years 2000 to 2013. The data include director-firm-year observations from S&P 1500 firms and exclude those from financial and utility firms. Panel A presents the number of independent director-firm observations being distracted as well as the total number of independent director-firm observations each year. Distractive events include illness (Column 2), receiving awards (Column 3), underperformance of either operating (Column 4)  or stock performance (Column 5), revelation of financial misconducts (Column 6), restructuring events including M&As (Column 7) and divestitures (Column 8), turnovers of CEO and committee members (Column 9), financial distress (Column 10) and a combination of these events (Column 11). A director is considered to be distracted for the year if the time overlap (in days) of distraction periods and the fiscal year accounts for at least 50% (or 25% if distracted by illness) of the fiscal year. All events, except for illness and awards, are strictly restricted to occur to another important S&P 1500 directorship that the director holds at the same time. Another directorship is defined to be important for an independent director if (1) it is 10% larger than the director's smallest directorship within S&P 1500 universe in terms of market capitalization (or total assets where market capitalization is not available); (2) the independent director serves as an executive director at this other firm or (3) the independent director is on a committee responsible for addressing the arising event. A responsible committee includes audit committee during the revelation of financial misconduct, investment committee during restructuring in the form of M&As and divestitures and nomination committee during financial distress. Distraction by illness is defined as situations where (1) an independent director is ill, (2) another independent director sitting on the same nomination or compensation committee at another firm is ill, or (3) the CEO of another firm where the independent director serves at the same is ill and this directorship is important or the director is on the nomination committee of this other firm. An independent director is distracted by awards if he/she is an overall winner of national awards. Underperformance by both operating and stock performance is defined as lower industry-adjusted annual performance than the prior year. The revelation of financial misconducts when there is likely investigation and public attention is inferred from Federal Securities Database from Karpoff et al. (2013). The events of M&As and divestitures are defined to be potentially distractive for directors in the acquiring firm if the transaction size is at least 10% of its market value of equity, for directors in the immediate target firm as long as the immediate target firm is listed and for directors in the ultimate parent firm of the target if the transaction size is at least 10% of its market value of equity. The distraction by director turnover occurs when (1) another independent director sitting on the same nomination or compensation committee at another firm departs and the committee size decreases, or (2) the CEO of another firm where the independent director serves at the same departs and this other directorship is more important or the director is on the nomination committee of this other firm. Independent directors may also be distracted by financial distress of another firm he/she serves for at the same time, as long as this other directorship is important. Financial distress is defined to include credit ratings downgrades, filings of Chapter 11 and delisting (of firms that with price below acceptable level, firms having insufficient capital, surplus, and/or equity, firms having insufficient (or non-compliance with rules of) float or assets, and firms delinquent in filing, non-payment of fees; or do not meet exchange's financial guidelines for continued listing). Column 12 shows the number of all independent director-firms in the sample in each year. Panel B presents the percentage of independent directors that are distracted each year, with the same definitions of distraction events as Panel A. For example, Column 2 of Panel B is computed as Column 2 of Panel A divided by Column 12 of Panel A, and Column 11 of Panel B is computed as Column 11 of Panel A divided by Column 12 of Panel A. Details about distractive events and identification of preoccupied directors are provided in the section of Capturing Preoccupied Directors.
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**Panel A Number of Preoccupied Independent Directors by Event**

| [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Illness | Awards | Operating | Stock | Misconduct | M&A | Divestiture | Turnover | Distress | All | Sample |
| 2000 | 4 | 10 | 373 | 422 | 41 | 209 | 69 | 200 | 7 | 652 | 3343 |
| 2001 | 0 | 20 | 535 | 545 | 63 | 236 | 68 | 351 | 10 | 908 | 3872 |
| 2002 | 1 | 42 | 611 | 671 | 128 | 248 | 70 | 368 | 20 | 1135 | 5249 |
| 2003 | 14 | 40 | 753 | 725 | 152 | 221 | 87 | 438 | 20 | 1283 | 5978 |
| 2004 | 22 | 40 | 794 | 861 | 190 | 203 | 82 | 494 | 16 | 1420 | 6428 |
| 2005 | 20 | 36 | 774 | 775 | 190 | 300 | 106 | 551 | 25 | 1474 | 6775 |
| 2006 | 58 | 46 | 857 | 803 | 227 | 326 | 111 | 488 | 39 | 1503 | 7105 |
| 2007 | 77 | 39 | 788 | 810 | 235 | 327 | 125 | 627 | 31 | 1596 | 7383 |
| 2008 | 44 | 47 | 858 | 1024 | 177 | 254 | 81 | 602 | 15 | 1698 | 7528 |
| 2009 | 22 | 29 | 949 | 881 | 161 | 311 | 134 | 535 | 15 | 1662 | 7656 |
| 2010 | 17 | 30 | 999 | 1047 | 102 | 333 | 143 | 496 | 17 | 1748 | 7887 |
| 2011 | 61 | 19 | 989 | 1123 | 41 | 436 | 167 | 581 | 8 | 1913 | 8001 |
| 2012 | 21 | 22 | 1012 | 1037 | 0 | 448 | 178 | 724 | 8 | 1881 | 8136 |
| 2013 | 10 | 43 | 1120 | 1192 | 0 | 366 | 163 | 362 | 9 | 1919 | 8330 |
| Average | 27 | 33 | 815 | 851 | 122 | 301 | 113 | 487 | 17 | 1485 | 6691 |

**Panel B Percentage of Preoccupied Independent Directors by Event**

| [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] |
|---|---|---|---|---|---|---|---|---|---|---|
| Year | Illness | Awards | Operating | Stock | Misconduct | M&A | Divestiture | Turnover | Distress | All |
| 2000 | 0.12% | 0.30% | 11.16% | 12.62% | 1.23% | 6.25% | 2.06% | 5.98% | 0.21% | 19.50% |
| 2001 | 0.00% | 0.52% | 13.82% | 14.08% | 1.63% | 6.10% | 1.76% | 9.07% | 0.26% | 23.45% |
| 2002 | 0.02% | 0.80% | 11.64% | 12.78% | 2.44% | 4.72% | 1.33% | 7.01% | 0.38% | 21.62% |
| 2003 | 0.23% | 0.67% | 12.60% | 12.13% | 2.54% | 3.70% | 1.46% | 7.33% | 0.33% | 21.46% |
| 2004 | 0.34% | 0.62% | 12.35% | 13.39% | 2.96% | 3.16% | 1.28% | 7.69% | 0.25% | 22.09% |
| 2005 | 0.30% | 0.53% | 11.42% | 11.44% | 2.80% | 4.43% | 1.56% | 8.13% | 0.37% | 21.76% |
| 2006 | 0.82% | 0.65% | 12.06% | 11.30% | 3.19% | 4.59% | 1.56% | 6.87% | 0.55% | 21.15% |
| 2007 | 1.04% | 0.53% | 10.67% | 10.97% | 3.18% | 4.43% | 1.69% | 8.49% | 0.42% | 21.62% |
| 2008 | 0.58% | 0.62% | 11.40% | 13.60% | 2.35% | 3.37% | 1.08% | 8.00% | 0.20% | 22.56% |
| 2009 | 0.29% | 0.38% | 12.40% | 11.51% | 2.10% | 4.06% | 1.75% | 6.99% | 0.20% | 21.71% |
| 2010 | 0.22% | 0.38% | 12.67% | 13.28% | 1.29% | 4.22% | 1.81% | 6.29% | 0.22% | 22.16% |
| 2011 | 0.76% | 0.24% | 12.36% | 14.04% | 0.51% | 5.45% | 2.09% | 7.26% | 0.10% | 23.91% |
| 2012 | 0.26% | 0.27% | 12.44% | 12.75% | 0.00% | 5.51% | 2.19% | 8.90% | 0.10% | 23.12% |
| 2013 | 0.12% | 0.52% | 13.45% | 14.31% | 0.00% | 4.39% | 1.96% | 4.35% | 0.11% | 23.04% |
| Average | 0.36% | 0.50% | 12.17% | 12.73% | 1.87% | 4.60% | 1.68% | 7.31% | 0.26% | 22.08% |

**Table 2 Summary Statistics**

This table presents means and medians for various variables for fiscal years 2000 to 2013. The data include S&P 1500 firms and exclude financial and utility firms. Panel A presents director-firm-year level variables focusing on independent directors. *Distracted* is an indicator that equals 1 if the independent director is distracted by for at least 50% (or 25% if distracted by illness) of the fiscal year and 0 otherwise. A detailed description of the distractive events, distraction periods and requirements on the relative importance of a directorship related to the distractive events is provided in Capturing Preoccupied Directors. Panel B presents firm-year variables. Apart from excluding non-S&P 1500 and financial and utility firms, the sample further excludes dual class firms and firms with a dominating insider shareholder. *Independent Distracted* is the fraction of independent directors that are distracted. *Directors Indep & Undistr* is the fraction of directors that are independent and undistracted. *Busy Board* is an indicator variable that equals 1 if more than 50% of independent directors each hold 3 or more directorships and is 0 otherwise. All variable definitions are reported in Appendix A.

**Panel A Director level**

|                          | N     | Mean   | Median | 25th Percentile | 75th Percentile |
|--------------------------|-------|--------|--------|-----------------|-----------------|
| Distracted               | 93671 | 0.222  | 0      | 0               | 0               |
| Attended <75% of Meetings| 74756 | 0.024  | 0      | 0               | 0               |
| # of Directorships       | 93671 | 1.891  | 2      | 1               | 2               |
| Director Age             | 93571 | 61.505 | 62     | 56              | 67              |
| Director Tenure          | 93671 | 7.63   | 6      | 3               | 10.3            |
| Director Ownership       | 74883 | 0.003  | 0      | 0               | 0.001           |
| Committee Member         | 93671 | 0.916  | 1      | 1               | 1               |

**Panel B Firm level**

|                          | N     | Mean     | Median   | 25th Percentile | 75th Percentile |
|--------------------------|-------|----------|----------|-----------------|-----------------|
| Independent Distracted   | 12519 | 0.204    | 0.176    | 0               | 0.333           |
| Directors Indep & Undistr| 12524 | 0.596    | 0.6      | 0.5             | 0.714           |
| Busy Board               | 12519 | 0.075    | 0        | 0               | 0               |
| ROA                      | 12467 | 0.17     | 0.157    | 0.107           | 0.223           |
| Tobin's Q                | 12342 | 2.127    | 1.688    | 1.293           | 2.43            |
| Board Size               | 12524 | 9.104    | 9        | 7               | 11              |
| Assets ($ million)       | 12514 | 7160.117 | 1517.684 | 539.9           | 4890.346        |

**Table 3 Board Meeting Absence**

This table presents results from multivariate regression analysis of board meeting absence for independent directors conditioning on whether they are preoccupied, for fiscal years 2000 to 2013. The data include director-firm-year observations from S&P 1500 firms and exclude those from financial and utility industries. The dependent variable is one if the director attended less than 75% of the meetings for the year and zero otherwise. *Distracted* is an indicator that equals 1 if the independent director is distracted for at least 50% (or 25% if distracted by illness and awards) of the fiscal year and 0 otherwise. A detailed description of the distractive events, distraction periods and requirements on the relative importance of a directorship related to the distractive events is provided in Capturing Preoccupied Directors. *Major committee* is an indicator variable that equals 1 if the director is a nomination, audit, compensation or corporate governance committee member and 0 otherwise. All variable definitions are reported in Appendix A. Standard errors are robust to heteroscedasticity and clustered by director with p-values in parentheses. *, **, *** indicate significance at the 10%, 5% and 1% levels respectively.

| Dependent variable: Attended <75% of Meetings | Model 1 Logit | Model 2 OLS | Model 3 OLS | Model 4 Logit | Model 5 OLS | Model 6 OLS |
|---|---|---|---|---|---|---|
| Distracted | 0.830*** | 0.014*** | 0.013*** | 0.781*** | 0.021*** | 0.020*** |
|  | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| # of Directorships$_{t-1}$ | 0.147*** | 0.004*** | 0.004*** | 0.119** | 0.004** | 0.004** |
|  | (0.000) | (0.000) | (0.000) | (0.021) | (0.039) | (0.033) |
| Director Tenure$_{t-1}$ | -0.009 | -0.000 | -0.000 | -0.010 | -0.000 | -0.000 |
|  | (0.317) | (0.442) | (0.707) | (0.455) | (0.592) | (0.430) |
| Board Size$_{t-1}$ | 0.060** | 0.001*** | 0.001 | 0.085** | 0.003** | 0.003** |
|  | (0.012) | (0.005) | (0.222) | (0.014) | (0.010) | (0.040) |
| Director Age$_{t-1}$ | -0.015** | -0.000** | -0.000** | -0.009* | -0.002* | -0.001 |
|  | (0.022) | (0.040) | (0.047) | (0.059) | (0.082) | (0.133) |
| Director Ownership$_{t-1}$ | 0.793 | 0.019 | 0.011 | 1.458 | 0.082 | -0.016 |
|  | (0.578) | (0.629) | (0.695) | (0.608) | (0.551) | (0.794) |
| Post-SOX$_{t-1}$ | -1.063*** |  | -0.015*** | -0.022* |  | -0.002** |
|  | (0.000) |  | (0.000) | (0.057) |  | (0.045) |
| Ln(Assets)$_{t-1}$ | -0.038* | -0.001** | -0.007*** | -0.066* | -0.002** | -0.004 |
|  | (0.058) | (0.035) | (0.004) | (0.059) | (0.046) | (0.171) |
| ROA$_{t-1}$ | -1.094** | -0.020** | -0.015 | -0.663 | -0.017 | -0.002 |
|  | (0.035) | (0.039) | (0.181) | (0.343) | (0.357) | (0.917) |
| Ln(Tobin's Q)$_{t-1}$ | 0.228* | 0.006** | -0.003 | 0.352* | 0.011** | -0.010 |
|  | (0.084) | (0.035) | (0.351) | (0.068) | (0.027) | (0.133) |
| Committee Member$_{t-1}$ | -0.651*** | -0.015*** | -0.012*** | -0.599*** | -0.019** | -0.016** |
|  | (0.000) | (0.000) | (0.002) | (0.003) | (0.018) | (0.019) |
| Annual Director Retainer$_{t-1}$ |  |  |  | -0.004* | -0.001 | -0.001 |
|  |  |  |  | (0.080) | (0.108) | (0.154) |
| Director Meeting Fee$_{t-1}$ |  |  |  | -0.131* | -0.002* | -0.001 |
|  |  |  |  | (0.078) | (0.052) | (0.171) |
| # of Meetings$_{t-1}$ |  |  |  | -0.049* | -0.001** | -0.001 |
|  |  |  |  | (0.071) | (0.042) | (0.252) |
| Observations | 63,297 | 63,584 | 63,584 | 21,380 | 22,656 | 22,656 |
| FE | Ind & Yr | Ind * Yr | Firm & Yr | Ind & Yr | Ind * Yr | Firm & Yr |
| Pseudo R-squared | 0.0876 |  |  | 0.0720 |  |  |
| Adjusted R-squared |  | 0.019 | 0.044 |  | 0.018 | 0.101 |

**Table 4 Board Meeting Absence: Difference-in-Difference around Exogenous Changes in Director Busyness**

This table presents difference-in-difference estimates of board meeting absence for independent directors experiencing a distracting event, for fiscal years 2000 to 2013. A treatment director is identified as an independent director who is distracted for at least 50% (or 25% if distracted by illness) of the firm-year, but not in the prior year within the same firm. The control directors are the remaining independent directors on the board of the treatment directors, who are not distracted in both years. Both treatment and control directors must have constant number of directorships during the two years, and the number of directorships held by a control director must do not differ with a treatment director in the same firm-year by more than 1. The model estimated is:

$Meeting\ Absence_{i,t} = \beta_0 + \beta_1 Treat_i + \beta_2 Post_t + \beta_3 (Treat_i \times Post_t) + Controls_{i,t} + \alpha_i + \delta_t + u_{i,t}$.

$Post_t$ is an indicator variable that equals zero in the year prior to being distracted and one in the year of distraction. $Treat_i$ equals one for treatment director-years and zero for control director -years. The coefficient estimate of the interaction term, $\beta_3$, is the difference-in-difference estimate. The controls in Models 1 to 3 are the same as Model 1 of Table 3, and the controls in Models 4 to 6 are the same as Model 4 of Table 3. All controls are lagged by one year and suppressed for brevity. $\alpha_i$ and $\delta_t$ are fixed effects and year fixed effects, respectively. Standard errors are robust to heteroscedasticity and clustered by director with p-values in parentheses. *, **, *** indicate significance at the 10%, 5%, and 1% levels respectively.

| Dependent variable: Attended <75% of Meetings | Model 1 Logit | Model 2 OLS | Model 3 OLS | Model 4 Logit | Model 5 OLS | Model 6 OLS |
|---|---|---|---|---|---|---|
| Treat X Post | 0.679** | 0.011** | 0.011** | 0.974** | 0.024** | 0.014 |
| | (0.028) | (0.012) | (0.017) | (0.040) | (0.029) | (0.192) |
| Treat | -0.069 | -0.002 | -0.002 | -0.148 | -0.004 | -0.002 |
| | (0.733) | (0.419) | (0.420) | (0.651) | (0.529) | (0.731) |
| Post | 0.102 | 0.000 | 0.001 | -0.030 | -0.001 | 0.004 |
| | (0.595) | (0.883) | (0.592) | (0.925) | (0.909) | (0.430) |
| Observations | 16,156 | 17,264 | 17,264 | 4,208 | 4,864 | 4,864 |
| FE | Ind & Yr | Ind * Yr | Firm & Yr | Ind & Yr | Ind * Yr | Firm & Yr |
| Controls | Same as Model 1 of Table 3 | | | Same as Model 4 of Table 3 | | |
| Pseudo R-squared | 0.0671 | | | 0.0693 | | |
| Adjusted R-squared | | 0.023 | 0.026 | | 0.015 | 0.090 |

## Table 5 Relinquishing Directorships in the Following Year and Performance

This table presents results from multivariate regression analysis of net directorships lost for independent directors conditioning on whether they are preoccupied controlling for firm performance and other variables, for fiscal years 2000 to 2013. The data include director-firm-year observations from S&P 1500 firms and exclude those from financial and utility industries. *Distracted* is an indicator that equals 1 if the independent director is distracted for at least 50% (or 25% if distracted by illness and awards) of the fiscal year and 0 otherwise. A detailed description of the distractive events, distraction periods and requirements on the relative importance of a directorship related to the distractive events is provided in Capturing Preoccupied Directors. Standard errors are robust to heteroscedasticity and clustered by director with p-values in parentheses. All variable definitions are reported in Appendix A. Standard errors are robust to heteroscedasticity and clustered by director with p-values in parentheses. *, **, *** indicate significance at the 10%, 5% and 1% levels respectively.

| Dependent variable: Lost Regression: | Model 1 Logit | Model 2 OLS | Model 3 OLS | Model 4 Logit | Model 5 OLS | Model 6 OLS |
|---|---|---|---|---|---|---|
| Distracted X Annual Stock Return | -0.175*** | -0.011*** | -0.012*** | | | |
| | (0.004) | (0.002) | (0.002) | | | |
| Distracted X ROA | | | | -0.185** | -0.005 | -0.010** |
| | | | | (0.033) | (0.130) | (0.027) |
| Distracted | 0.017 | 0.004* | 0.004* | 0.037 | 0.004* | 0.004* |
| | (0.133) | (0.073) | (0.054) | (0.128) | (0.074) | (0.062) |
| Annual Stock Return$_{t-1}$ | -0.124*** | -0.010*** | -0.008*** | | | |
| | (0.000) | (0.000) | (0.000) | | | |
| ROA$_{t-1}$ | | | | -0.469*** | -0.032*** | -0.031** |
| | | | | (0.008) | (0.003) | (0.022) |
| # of Directorships$_{t-1}$ | 0.037** | 0.005*** | 0.007*** | 0.030* | 0.003** | 0.004*** |
| | (0.025) | (0.006) | (0.000) | (0.057) | (0.014) | (0.000) |
| Director Tenure$_{t-1}$ | 0.020*** | 0.003*** | 0.004*** | 0.019*** | 0.002*** | 0.002*** |
| | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Board Size$_{t-1}$ | 0.022** | 0.003** | 0.012*** | 0.022*** | 0.002** | 0.006*** |
| | (0.011) | (0.012) | (0.000) | (0.010) | (0.011) | (0.000) |
| Independent Board$_{t-1}$ | -0.133 | -0.010 | -0.015* | -0.166* | -0.006* | -0.007 |
| | (0.143) | (0.216) | (0.074) | (0.076) | (0.085) | (0.107) |
| Director Age$_{t-1}$ | 0.042*** | 0.005*** | 0.005*** | 0.037*** | 0.002*** | 0.003*** |
| | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Director Ownership$_{t-1}$ | 1.582** | 0.208** | 0.199** | 1.786*** | 0.154*** | 0.151*** |
| | (0.014) | (0.023) | (0.024) | (0.004) | (0.009) | (0.009) |
| Post-SOX$_{t-1}$ | -0.537*** | | -0.168*** | 0.271*** | | 0.027*** |
| | (0.000) | | (0.000) | (0.001) | | (0.000) |
| Ln(Assets)$_{t-1}$ | -0.080*** | -0.009*** | -0.001 | -0.098*** | -0.007*** | -0.001 |
| | (0.000) | (0.000) | (0.815) | (0.000) | (0.000) | (0.732) |
| Observations | 68,993 | 68,993 | 68,993 | 69,170 | 69,170 | 69,170 |
| FE | Ind & Yr | Ind * Yr | Firm & Yr | Ind & Yr | Ind * Yr | Firm & Yr |
| Pseudo R-squared | 0.0412 | | | 0.0393 | | |
| Adjusted R-squared | | 0.035 | 0.073 | | 0.026 | 0.043 |

**Table 6 Relinquishing Directorships in the Following Year and Performance: Difference-in-Difference around Exogenous Changes in Director Busyness**

This table presents difference-in-difference estimates of net directorships lost for independent directors experiencing a distracting event, for fiscal years 2000 to 2013. A treatment director is identified as an independent director who is distracted for at least 50% (or 25% if distracted by illness) of the firm-year, but not in the prior year within the same firm. The control directors are the remaining independent directors on the board of the treatment directors, who are not distracted in both years. Both treatment and control directors must have constant number of directorships during the two years, and the number of directorships held by a control director must do not differ with a treatment director in the same firm-year by more than 1. The model estimated is:

$$Lost\ Directorships_{i,t} = \beta_0 + \beta_1 Treat_i + \beta_2 Post_t + \beta_3(Treat_i \times Post_t) + Controls_{i,t} + \alpha_i + \delta_t + u_{i,t}.$$

$Post_t$ is an indicator variable that equals zero in the year prior to being distracted and one in the year of distraction. $Treat_i$ equals one for treatment director-years and zero for control director -years. The coefficient estimate of the interaction term, $\beta_3$, is the difference-in-difference estimate. The controls are the same as in Table 5 and lagged by one year, but are suppressed for brevity. $\alpha_i$ and $\delta_t$ are fixed effects and year fixed effects, respectively. Standard errors are robust to heteroscedasticity and clustered by director with p-values in parentheses. *, **, *** indicate significance at the 10%, 5%, and 1% levels respectively.

| Dependent variable: Lost Regression: | Model 2 Logit | Model 4 OLS | Model 6 OLS | Model 8 Logit | Model 10 OLS | Model 12 OLS |
|---|---|---|---|---|---|---|
| Treat X Post X Annual Stock Return | -0.156** | -0.019** | -0.034** | | | |
| | (0.038) | (0.031) | (0.012) | | | |
| Treat X Post X ROA | | | | -0.188* | -0.005* | -0.015* |
| | | | | (0.052) | (0.058) | (0.053) |
| Treat | -0.013 | -0.002 | -0.001 | -0.069 | -0.007 | -0.006 |
| | (0.880) | (0.815) | (0.888) | (0.644) | (0.522) | (0.584) |
| Post | 0.550*** | 0.059*** | 0.061*** | 0.696*** | 0.077*** | 0.075*** |
| | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Treat X Post | 0.081 | 0.014 | 0.015 | 0.056 | 0.016 | 0.015 |
| | (0.429) | (0.203) | (0.163) | (0.793) | (0.471) | (0.481) |
| Annual Stock Return$_{t-1}$ | -0.087* | -0.004* | -0.006** | | | |
| | (0.052) | (0.085) | (0.031) | | | |
| ROA$_{t-1}$ | | | | -0.437* | -0.046** | -0.089** |
| | | | | (0.068) | (0.049) | (0.031) |
| Treat X Annual Stock Return | -0.155 | -0.012 | 0.001 | | | |
| | (0.485) | (0.439) | (0.918) | | | |
| Post X Annual Stock Return | -0.034 | 0.006 | 0.000 | | | |
| | (0.814) | (0.737) | (0.985) | | | |
| Treat X ROA | | | | 0.219 | 0.024 | 0.032 |
| | | | | (0.763) | (0.659) | (0.568) |
| post X ROA | | | | -0.884 | -0.099 | -0.081 |
| | | | | (0.196) | (0.200) | (0.268) |
| Observations | 18,580 | 18,892 | 18, 892 | 18,580 | 18,892 | 18, 892 |
| FE | Ind & Yr | Ind * Yr | Firm & Yr | Ind & Yr | Ind * Yr | Firm & Yr |
| Controls | | | Same as Table 5 | | | |
| Pseudo R-squared | 0.0508 | | | 0.0508 | | |
| Adjusted R-squared | | 0.047 | 0.083 | | 0.047 | 0.085 |

**Table 7 Firm Performance and Value**

This table represents results from a multivariate regression analysis of firm performance and value for fiscal years 2000 to 2013. The data include S&P 1500 firms and exclude financial and utility firms, dual class firms and firms with a dominating insider shareholder. *ROA* is operating income before depreciation scaled by assets. *Ln(Tobin's Q)* is the natural logarithm of the market-to-book approximation of Tobin's Q. *Directors Indep & Undistr* is the fraction of directors that are independent and undistracted. *Independent Distracted* is the fraction of independent directors that are distracted. All variable definitions are reported in Appendix A. Standard errors are robust to heteroscedasticity and clustered by director with p-values in parentheses. *, **, *** indicate significance at the 10%, 5%, and 1% levels respectively.

| Dependent variable: | Model 1 | Model 2 ROA | Model 3 | Model 4 | Model 5 Ln(Tobin's Q) | Model 6 |
|---|---|---|---|---|---|---|
| Directors Indep & Undistr | 0.026*** | | | 0.185*** | | |
| | (0.004) | | | (0.000) | | |
| Independent Distracted | | -0.037*** | -0.032*** | | -0.166*** | -0.174*** |
| | | (0.001) | (0.000) | | (0.000) | (0.000) |
| Ln(Assets)$_{t-1}$ | -0.058*** | -0.013*** | -0.054*** | -0.199*** | -0.039*** | -0.200*** |
| | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| R&D / Sales$_{t-1}$ | -0.004*** | -0.007*** | -0.006*** | -0.005*** | 0.017*** | -0.005*** |
| | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Independent Busy$_{t-1}$ | -0.000 | 0.025* | -0.000 | 0.021 | 0.234 | 0.032 |
| | (0.961) | (0.082) | (0.968) | (0.528) | (0.433) | (0.340) |
| Independent Board$_{t-1}$ | -0.005 | 0.002 | 0.002 | 0.000 | 0.028 | 0.019 |
| | (0.418) | (0.792) | (0.796) | (0.993) | (0.291) | (0.356) |
| Independent Ownership$_{t-1}$ | -0.025** | -0.030** | -0.065*** | -0.075** | -0.072* | -0.062** |
| | (0.029) | (0.042) | (0.004) | (0.033) | (0.064) | (0.041) |
| CEO Ownership$_{t-1}$ | 0.049* | 0.058* | 0.003 | -0.705 | -0.178 | -0.745 |
| | (0.091) | (0.089) | (0.147) | (0.137) | (0.653) | (0.129) |
| CEO Ownership$^2_{t-1}$ | -0.107* | -0.181* | -0.003 | 1.484 | 0.995 | 1.538 |
| | (0.081) | (0.065) | (0.118) | (0.150) | (0.396) | (0.137) |
| Firm Age$_{t-1}$ | -0.005* | -0.021*** | -0.009* | -0.013 | -0.033** | -0.014 |
| | (0.098) | (0.001) | (0.096) | (0.118) | (0.017) | (0.117) |
| Ln(# of Bus Seg)$_{t-1}$ | -0.006* | -0.005* | -0.006* | -0.038*** | -0.047*** | -0.038*** |
| | (0.086) | (0.071) | (0.069) | (0.001) | (0.000) | (0.001) |
| Volatility$_{t-1}$ | -0.072*** | -0.145*** | -0.090*** | | | |
| | (0.000) | (0.000) | (0.000) | | | |
| Depreciation / Sales$_{t-1}$ | -0.024 | -0.049*** | -0.041** | | | |
| | (0.172) | (0.004) | (0.020) | | | |
| Operating Cash Flow$_{t-1}$ | | | | 0.536*** | 1.484*** | 0.532*** |
| | | | | (0.000) | (0.000) | (0.000) |
| Operating Cash Flow$_{t-2}$ | | | | 0.237*** | 0.711*** | 0.237*** |
| | | | | (0.000) | (0.000) | (0.000) |
| Operating Cash Flow$_{t-3}$ | | | | -0.007 | -0.035 | -0.006 |
| | | | | (0.504) | (0.136) | (0.561) |
| Capex / Sales$_{t-1}$ | | | | 0.001** | 0.002*** | 0.001* |
| | | | | (0.046) | (0.003) | (0.055) |
| Observations | 12,028 | 12,028 | 12,028 | 11,606 | 11,606 | 11,606 |
| FE | Firm & Yr | Ind * Yr | Firm & Yr | Firm & Yr | Ind * Yr | Firm & Year |
| Adjusted R-squared | 0.593 | 0.171 | 0.586 | 0.761 | 0.401 | 0.761 |

**Table 8 Firm Performance and Value: Role of (Non-)Coopted Independent Directors**

This table represents results from a multivariate regression analysis of firm performance and value for fiscal years 2000 to 2013. The data include S&P 1500 firms and exclude financial and utility firms, dual class firms and firms with a dominating insider shareholder. *ROA* is operating income before depreciation scaled by assets. *Ln(Tobin's Q)* is the natural logarithm of the market-to-book approximation of Tobin's Q. *Directors (Indep, Undistr & Non-Coopted)* is the fraction of directors that are independent, undistracted and non-coopted. *Directors (Indep, Undistr & Co-opted)* is the fraction of directors that are independent, undistracted and co-opted. *Independent (Distracted & Non-Coopted)* is the fraction of independent directors that are distracted and non-coopted. *Independent (Distracted & Co-opted)* is the fraction of independent directors that are distracted and co-opted. All variable definitions are reported in Appendix A. Standard errors are robust to heteroscedasticity and clustered by director with p-values in parentheses. *, **, *** indicate significance at the 10%, 5%, and 1% levels respectively.

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
|---|---|---|---|---|---|---|
| Dependent variable: | | ROA | | | Ln(Tobin's Q) | |
| Directors (Indep, Undistr & Non-Coopted) | 0.028*** (0.005) | | | 0.205*** (0.000) | | |
| Directors (Indep, Undistr & Co-opted) | 0.025** (0.017) | | | 0.159*** (0.000) | | |
| Independent (Distracted & Non-Coopted) | | -0.039*** (0.003) | -0.041*** (0.000) | | -0.178*** (0.000) | -0.195*** (0.000) |
| Independent (Distracted & Co-opted) | | -0.033** (0.025) | -0.019* (0.057) | | -0.146*** (0.009) | -0.141*** (0.000) |
| Ln(Assets)$_{t-1}$ | -0.058*** (0.000) | -0.013*** (0.000) | -0.054*** (0.000) | -0.198*** (0.000) | -0.039*** (0.000) | -0.200*** (0.000) |
| R&D / Sales$_{t-1}$ | -0.004*** (0.000) | -0.007*** (0.000) | -0.006*** (0.000) | -0.004*** (0.000) | 0.017*** (0.000) | -0.005*** (0.000) |
| Independent Busy$_{t-1}$ | -0.000 (0.963) | 0.025* (0.078) | 0.000 (0.992) | 0.021 (0.526) | 0.235 (0.229) | 0.033 (0.319) |
| Independent Board$_{t-1}$ | -0.005 (0.422) | 0.002 (0.785) | 0.002 (0.797) | 0.001 (0.976) | 0.029 (0.285) | 0.019 (0.354) |
| Independent Ownership$_{t-1}$ | -0.025** (0.041) | -0.030* (0.066) | -0.066*** (0.004) | -0.071** (0.034) | -0.072* (0.063) | -0.064** (0.039) |
| CEO Ownership$_{t-1}$ | 0.044* (0.055) | 0.062 (0.108) | 0.017* (0.060) | -0.633 (0.160) | -0.202 (0.613) | -0.781 (0.122) |
| CEO Ownership$^2_{t-1}$ | -0.096* (0.051) | -0.193* (0.077) | -0.036* (0.053) | 1.322 (0.204) | 1.063 (0.369) | 1.631 (0.114) |
| Firm Age$_{t-1}$ | -0.005 (0.102) | -0.021*** (0.001) | -0.004* (0.098) | -0.012 (0.129) | -0.033** (0.032) | -0.015 (0.131) |
| Ln(# of Bus Seg)$_{t-1}$ | -0.006* (0.087) | -0.005 (0.139) | -0.006 (0.125) | -0.038*** (0.001) | -0.047*** (0.000) | -0.038*** (0.001) |
| Volatility$_{t-1}$ | -0.072*** (0.000) | -0.145*** (0.000) | -0.091*** (0.000) | | | |
| Depreciation / Sales$_{t-1}$ | -0.024 (0.177) | -0.049*** (0.004) | -0.041** (0.019) | | | |
| Operating Cash Flow$_{t-1}$ | | | | 0.537*** (0.000) | 1.483*** (0.000) | 0.532*** (0.000) |
| Operating Cash Flow$_{t-2}$ | | | | 0.235*** (0.000) | 0.711*** (0.000) | 0.237*** (0.000) |
| Operating Cash Flow$_{t-3}$ | | | | -0.007 (0.483) | -0.035 (0.138) | -0.006 (0.579) |
| Capex / Sales$_{t-1}$ | | | | 0.001* (0.069) | 0.002*** (0.003) | 0.001* (0.051) |
| Observations | 12,028 | 12,028 | 12,028 | 11,606 | 11,606 | 11,606 |
| FE | Firm & Yr | Ind * Yr | Firm & Yr | Firm & Yr | Ind * Yr | Firm & Yr |
| Adjusted R-squared | 0.593 | 0.171 | 0.586 | 0.761 | 0.401 | 0.761 |

## Table 9 Firm Performance and Value: Difference-in-Difference around Exogenous Changes in Director Busyness

This table presents difference-in-difference estimates of firm operating performance and firm value. The treatment firms are those with distracted independent directors in the current year but not in the prior 3 years. Control firms do not have a distracted director throughout the 4 years. They are matched with replacement to the treatment firms by 5% radius of average number of directorships of independent directors and Fama-French 48. The data include observations in years $t-1$, $t$ and $t+1$, where year $t$ is the treatment year. The model estimated is:

$$Firm\ Performance\ or\ Value_{i,t} = \beta_0 + \beta_1 Treat_i + \beta_2 Post_t + \beta_3(Treat_i \times Post_t) + Controls_{i,t} + \alpha_i + \delta_t + u_{i,t}.$$

$Post_t$ is an indicator variable that equals zero in the year prior to having distracted independent directors and one in the year of having distracted independent directors as well as the year after. $Treat_i$ equals one for treatment firm-years and zero for control firm-years. The coefficient estimate of the interaction term, $\beta_3$, is the difference-in-difference estimate. The controls are the same as in models 1 and 4 of Table 7 for ROA and Ln(Tobin's Q), respectively. All controls are lagged by one year and suppressed for brevity. $\alpha_i$ and $\delta_t$ are fixed effects and year fixed effects, respectively. Standard errors are robust to heteroscedasticity and clustered by director with p-values in parentheses. *, **, *** indicate significance at the 10%, 5%, and 1% levels respectively.

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
|---|---|---|---|---|---|---|
| Dependent variable: | | ROA | | | Ln(Tobin's Q) | |
| Treat X Post | -0.019** | -0.020** | -0.024*** | -0.034 | -0.036 | -0.059** |
| | (0.042) | (0.036) | (0.002) | (0.328) | (0.344) | (0.038) |
| Treat | 0.016 | 0.017 | 0.009 | -0.119*** | -0.115*** | -0.046 |
| | (0.196) | (0.168) | (0.604) | (0.005) | (0.009) | (0.309) |
| Post | 0.012 | 0.016 | 0.011 | -0.006 | 0.002 | 0.006 |
| | (0.202) | (0.139) | (0.279) | (0.835) | (0.953) | (0.839) |
| Observations | 816 | 816 | 816 | 816 | 816 | 816 |
| FE | Ind & Yr | Ind * Yr | Firm & Yr | Ind & Yr | Ind * Yr | Firm & Yr |
| Controls | Same as Model 1 of Table 7 | | | Same as Model 4 of Table 7 | | |
| Adjusted R-squared | 0.268 | 0.275 | 0.733 | 0.433 | 0.417 | 0.845 |

**Table 10 Firm Performance and Value: Role of (Non-)Coopted Independent Directors with Difference-in-Difference around Exogenous Changes in Director Busyness**

This table presents difference-in-difference estimates of firm operating performance and firm value. The treatment firms are those with distracted independent directors in the current year but not in the prior 3 years. Control firms do not have a distracted independent director throughout the 4 years. They are matched with replacement to the treatment firms by 5% radius of average number of directorships of independent directors and Fama-French 48. The data include observations in years $t-1$, $t$ and $t+1$, where year $t$ is the treatment year. The model estimated is:

$$Firm\ Performance\ or\ Value_{i,t} = \beta_0 + \beta_1 TreatNC_i + \beta_2 TreatC_i + \beta_3 Post_t + \beta_4(TreatNC_i \times Post_t) + \beta_5(TreatC_i \times Post_t) + Controls_{i,t} + \alpha_i + \delta_t + u_{i,t}.$$

$Post_t$ is an indicator variable that equals zero in the year prior to having distracted independent directors and one in the year of having distracted independent directors as well as the year after. $TreatNC_i$ equals one (zero) for treatment firm-years with (without) preoccupied independent directors that are non-coopted (and control firm-years). $TreatC_i$ equals one (zero) for treatment firm-years with (without) preoccupied independent directors that are coopted (and control firm-years). The coefficient estimate of the interaction terms, $\beta_4$ and $\beta_5$, are the difference-in-difference estimate. The controls are the same as in models 1 and 4 of Table 7 for ROA and Ln(Tobin's Q), respectively. All controls are lagged by one year and suppressed for brevity. $\alpha_i$ and $\delta_t$ are fixed effects and year fixed effects, respectively. Standard errors are robust to heteroscedasticity and clustered by director with p-values in parentheses. *, **, *** indicate significance at the 10%, 5%, and 1% levels respectively.

| Dependent variable: | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
|---|---|---|---|---|---|---|
| | | ROA | | | Ln(Tobin's Q) | |
| TreatNC X Post | -0.025*** | -0.029*** | -0.029*** | -0.065* | -0.067* | -0.061* |
| | (0.006) | (0.003) | (0.003) | (0.058) | (0.093) | (0.068) |
| TreatC X Post | 0.008 | 0.003 | 0.003 | -0.017 | -0.057 | -0.020 |
| | (0.563) | (0.825) | (0.811) | (0.721) | (0.333) | (0.695) |
| TreatNC | 0.026* | 0.027** | 0.024 | -0.081 | -0.082 | 0.019 |
| | (0.057) | (0.047) | (0.235) | (0.111) | (0.129) | (0.659) |
| TreatC | -0.010 | -0.005 | -0.034* | -0.056 | -0.021 | -0.017 |
| | (0.494) | (0.772) | (0.086) | (0.311) | (0.750) | (0.808) |
| Post | 0.010 | 0.015 | 0.009 | -0.024 | -0.015 | -0.013 |
| | (0.277) | (0.146) | (0.370) | (0.412) | (0.678) | (0.698) |
| Observations | 816 | 816 | 816 | 816 | 816 | 816 |
| FE | Ind & Yr | Ind * Yr | Firm & Yr | Ind & Yr | Ind * Yr | Firm & Yr |
| Controls | Same as Model 1 of Table 7 | | | Same as Model 4 of Table 7 | | |
| Adjusted R-squared | 0.269 | 0.274 | 0.735 | 0.428 | 0.413 | 0.845 |

**Table 11 Acquisition Announcement Returns**

This table presents results from a multivariate OLS analysis of acquisition performance measured as cumulative abnormal returns around announcement for fiscal years 2000 to 2013. The data include 2,659 acquisitions made by S&P 1500 firms, excluding those made by financial and utility firms, dual class firms, Real Estate Investment Trusts and firms with a dominating insider shareholder. *Directors Indep & Undistr* is the fraction of directors that are independent and undistracted. *Independent Distracted* is the fraction of independent directors that are distracted. Distraction is measured over the window of (-365, -1) where date 0 is the acquisition announcement date (i.e., in terms of whether an independent director is distracted for the majority of the last 365 days prior to the acquisition). All variable definitions are reported in Appendix A. Standard errors are robust to heteroscedasticity and clustered by director with p-values in parentheses. *, **, *** indicate significance at the 10%, 5%, and 1% levels respectively.

| Dependent variable: CAR | Model 1 | Model 2 | Model 3 | Model 4 |
|---|---|---|---|---|
| Directors Indep & Undistr$_{(-365, -1)}$ | 1.220* | 0.981* | | |
| | (0.053) | (0.084) | | |
| Independent Distracted$_{(-365, -1)}$ | | | -0.268 | -0.038 |
| | | | (0.159) | (0.195) |
| Ln(Assets)$_{t-1}$ | -0.525*** | -0.539*** | -0.530*** | -0.540*** |
| | (0.000) | (0.000) | (0.000) | (0.000) |
| Leverage$_{t-1}$ | 0.640 | 0.760 | 0.719 | 0.797 |
| | (0.582) | (0.475) | (0.534) | (0.453) |
| Ln(Tobin's Q)$_{t-1}$ | -0.537 | -0.760 | -0.543 | -0.769 |
| | (0.222) | (0.118) | (0.216) | (0.113) |
| R&D / Sales$_{t-1}$ | -0.336* | -0.368** | -0.331* | -0.363** |
| | (0.064) | (0.024) | (0.067) | (0.026) |
| Independent Busy$_{t-1}$ | 0.742 | 0.884 | 0.493 | 0.719 |
| | (0.340) | (0.327) | (0.538) | (0.444) |
| Independent Board$_{t-1}$ | -0.369 | -0.161 | -0.114 | 0.040 |
| | (0.635) | (0.865) | (0.876) | (0.965) |
| E-Index$_{t-1}$ | -0.042 | -0.167 | -0.030 | -0.158 |
| | (0.767) | (0.277) | (0.829) | (0.300) |
| Stock Runup | -0.013** | -0.012* | -0.014** | -0.012* |
| | (0.033) | (0.073) | (0.029) | (0.069) |
| Relative Deal Size | -0.670 | -0.244 | -0.635 | -0.233 |
| | (0.099) | (0.160) | (0.130) | (0.176) |
| % Cash Financed | 0.006** | 0.006 | 0.006** | 0.006 |
| | (0.049) | (0.139) | (0.049) | (0.142) |
| Non-Diversifying Bid | 0.362 | 0.228 | 0.367 | 0.226 |
| | (0.265) | (0.533) | (0.258) | (0.538) |
| Observations | 2,595 | 2,595 | 2,595 | 2,595 |
| FE | Ind & Yr | Ind * Yr | Ind & Yr | Ind * Yr |
| Adjusted R-squared | 0.046 | 0.073 | 0.046 | 0.073 |

**Table 12 Acquisition Announcement Returns: Role of (Non-)Coopted Independent Directors**

This table presents results from a multivariate OLS analysis of acquisition performance measured as cumulative abnormal returns around announcement for fiscal years 2000 to 2013. The data include 2,659 acquisitions made by S&P 1500 firms, excluding those made by financial and utility firms, dual class firms, Real Estate Investment Trusts and firms with a dominating insider shareholder. *Directors (Indep, Undistr & Non-Coopted)* is the fraction of directors that are independent, undistracted and non-coopted. *Directors (Indep, Undistr & Co-opted)* is the fraction of directors that are independent, undistracted and co-opted. *Independent (Distracted & Non-Coopted)* is the fraction of independent directors that are distracted and non-coopted. *Independent (Distracted & Co-opted)* is the fraction of independent directors that are distracted and co-opted. Distraction is measured over the window of (-365, -1) where date 0 is the acquisition announcement date (i.e., in terms of whether an independent director is distracted for the majority of the last 365 days prior to the acquisition). All variable definitions are reported in Appendix A. Standard errors are robust to heteroscedasticity and clustered by director with p-values in parentheses. *, **, *** indicate significance at the 10%, 5%, and 1% levels respectively.

| Dependent variable: CAR | Model 1 | Model 2 | Model 3 | Model 4 |
|---|---|---|---|---|
| Directors (Indep, Undistr & Non-Coopted)$_{(-365, -1)}$ | 0.630* | 0.385* | | |
| | (0.054) | (0.061) | | |
| Directors (Indep, Undistr & Co-opted)$_{(-365, -1)}$ | 0.454* | 0.352* | | |
| | (0.060) | (0.073) | | |
| Independent (Distracted & Non-Coopted)$_{(-365, -1)}$ | | | -0.276* | -0.374* |
| | | | (0.055) | (0.073) |
| Independent (Distracted & Co-opted)$_{(-365, -1)}$ | | | 1.122 | 1.181 |
| | | | (0.153) | (0.164) |
| Ln(Assets)$_{t-1}$ | -0.535*** | -0.547*** | -0.524*** | -0.538*** |
| | (0.000) | (0.000) | (0.000) | (0.000) |
| Leverage$_{t-1}$ | 0.688 | 0.751 | 0.684 | 0.754 |
| | (0.547) | (0.477) | (0.555) | (0.483) |
| Ln(Tobin's Q)$_{t-1}$ | -0.560 | -0.789 | -0.549 | -0.782 |
| | (0.202) | (0.104) | (0.212) | (0.107) |
| R&D / Sales$_{t-1}$ | -0.319* | -0.352** | -0.329* | -0.356** |
| | (0.078) | (0.030) | (0.067) | (0.029) |
| Independent Busy$_{t-1}$ | 0.702 | 0.795 | 0.172 | 0.404 |
| | (0.426) | (0.440) | (0.860) | (0.716) |
| Independent Board$_{t-1}$ | -0.198 | 0.011 | -0.164 | -0.008 |
| | (0.796) | (0.991) | (0.821) | (0.993) |
| E-Index$_{t-1}$ | -0.040 | -0.167 | -0.033 | -0.161 |
| | (0.770) | (0.274) | (0.814) | (0.295) |
| Stock Runup | -0.013** | -0.012* | -0.013** | -0.012* |
| | (0.033) | (0.072) | (0.029) | (0.068) |
| Relative Deal Size | -0.656* | -0.254 | -0.634 | -0.235 |
| | (0.096) | (0.166) | (0.132) | (0.178) |
| % Cash Financed | 0.006* | 0.006 | 0.006* | 0.006 |
| | (0.050) | (0.146) | (0.050) | (0.141) |
| Non-Diversifying Bid | 0.361 | 0.226 | 0.358 | 0.221 |
| | (0.266) | (0.538) | (0.273) | (0.548) |
| Observations | 2,595 | 2,595 | 2,595 | 2,595 |
| FE | Ind & Year | Ind * Year | Ind & Year | Ind * Year |
| Adjusted R-squared | 0.047 | 0.073 | 0.046 | 0.073 |

## Appendix A Variable Definitions

| Variable | Definition |
|---|---|
| *Director Characteristics* | |
| Distracted | Indicator variable: equals 1 if the director has been distracted by a combination of events for at least 50% (or 25% if distracted by illness) of the fiscal year. A detailed description of the distractive events, distraction periods and requirements on the relative importance of a directorship related to the distractive events is provided in Capturing Preoccupied Directors. |
| Attended < 75% of Meetings | Indicator variable: equals 1 if the director attended less than 75% of the meetings during the year. Source: RiskMetrics. |
| Busy Committee | Indicator variable: equals 1if the director is on the compensation committee or the nomination committee. |
| Director Age | Director age. Source: BoardEx. |
| Director Tenure | The number of years a director has served on the board. Source: BoardEx. |
| Director Ownership | The fraction of common shares outstanding held by the director, including stock options. Missing values are replaced with the value of the former year, if the former year value is non-missing. Source: BoardEx. |
| Independent | Indicator variable: equals 1 if the director is reported to be independent by the firm (which I collect from BoardEx) and is not an interlocking director. I define two directors to be interlocking if they are inside directors that sit on each other's board in the same year in BoardEx. |
| Lost | Indicator variable: equals 1 if the director relinquishes the current directorship within one year. Source: BoardEx. |
| Major Committee | Indicator variable: equals 1 if the director is a nomination, audit, compensation or corporate governance committee member. Source: BoardEx. |
| # of Directorships | Number of directorships a director holds concurrently. Source: BoardEx. |
| *CEO Characteristics* | |
| CEO Age | Age of the CEO. Source: Execucomp, BoardEx |
| CEO Tenure | The number of years the CEO has served as the CEO. Source: BoardEx. |
| CEO Ownership | The percentage of common shares outstanding held by the CEO at year-end, including stock options. Source: Execucomp, BoardEx. |
| Duality | Indicator variable: equals 1 if the CEO is also the chairperson and is 0 otherwise. Source: BoardEx. |
| *Board Characteristics* | |
| Annual Director Retainer | The annual cash retained paid to directors. Source: Execucomp for fiscal years up to 2006. |
| Audit Chair Distracted | Indicator variable: equals 1 if the audit committee chair is distracted. |
| Audit Chair Indep & Undistr | Indicator variable: equals 1 if the audit committee chair is independent and undistracted. |
| Comp Chair Distracted | Indicator variable: equals 1 if the compensation committee chair is distracted. |
| Director Meeting Fee | Meeting attendance fee received by all directors. Source: Execucomp for fiscal years up to 2006. |
| Directors Indep & Undistr | The fraction of directors that are independent and undistracted. |
| Directors (Indep, Undistr & Co-opted) | The fraction of directors that are independent, undistracted and co-opted. Co-option is defined as the independent director being appointed after the current CEO assumes office. |
| Directors (Indep, Undistr & Non-coopted) | The fraction of directors that are independent, undistracted and non-coopted. Co-option is defined as the independent director being appointed after the current CEO assumes office. |
| Board Size | The number of directors on the board at year-end. Source: BoardEx. |
| Busy Board | Indicator variable: equals 1 if more than 50% of independent directors each holds 3 or more directorships and is 0 otherwise. Source: BoardEx. |
| Independent Board | Indicator variable: equals 1 if more than 50% of directors are independent and is 0 otherwise. |

| | |
|---|---|
| Independent Busy | The fraction of independent directors that hold 3 or more directorships. Source: BoardEx. |
| Independent Distracted | The fraction of independent directors that are distracted. |
| Independent (Distracted & Co-opted) | The fraction of independent directors that are distracted and co-opted. Co-option is defined as the independent director being appointed after the current CEO assumes office. |
| Independent (Distracted & Non-coopted) | The fraction of independent directors that are distracted and non-cooted. Co-option is defined as the independent director being appointed after the current CEO assumes office. |
| Independent Ownership | Percentage of common shares outstanding held by all independent directors of the board at year-end, including stock options. Source: RiskMetrics. |
| # of Meetings | The number of board meetings during the year. Source: Execucomp for fiscal years up to 2006. |
| *Firm Characteristics* | |
| Annual Stock Return | Effective annual return computed using monthly returns of 12 months before the fiscal year endding date. Source: CRSP. |
| Assets | Year-end total assets: item6. Source: Compustat. |
| Capex | Capital expenditures (set missing values to 0 as in Masulis et al., 2009): max(item128,0 ). Source: Compustat. |
| Depreciation | Depreciation expense: item14. Source: Compustat. |
| E-Index | The number of anti-takeover provisions as in Gompers et al. (2003). I use the most recent E-Index for missing years, unless otherwise noted. Missing values are then set to be state averages, because the six key anti-takeover provisions are enforced and therefore mostly determined by state laws. Source: RiskMetrics. |
| Firm Age | Number of years since IPO. Source: Compustat. |
| Growth(Assets) | Growth rate in total assets from prior year to current year. |
| Herfindahl Index | Calculated using all S&P1500 firms for each of the Fama-French 48 industry using the formula of $\Sigma i(sales_i/sales_{ind})2$, where i is the number of firms in the industry. Source: Compustat. |
| Leverage | (Short-term debt + long-term debt) / total assets: (item 34 + item9) / item6. All values are year-end. Source: Compustat. |
| # of Bus Seg | The number of business segments. Source: Compustat. |
| Operating Cash Flow | Annual cash flow from operations) / beginning-year total assets: item308 / lag(item6). Source: Compustat. |
| Post-SOX | Indicator variable: equals 1 if the observations occurs in fiscal year 2001 or later and is 0 otherwise. |
| R&D | Research and development expense (set missing values to 0 as in Masulis et al., 2009) / sales/turnover (net): max(item46,0). Source: Compustat. |
| ROA | Operating income before depreciation / beginning-year total assets: item13 / lag(item6). Source: Compustat. |
| Sales | Sales/turnover (net): item12. Source: Compustat. |
| Tobin's Q | (Total assets − book equity + market value of equity) / total assets: (data6 − data60 + data199 * data25) / data6. All values are year-end. Source: Compustat. |
| Volatility | Annualized standard deviation of monthly stock-return during the latest 60 months starting retrospectively from the fiscal-year-end date. If 60 months of return data are not available, I use the actual number of months of data available with a minimum requirement of 12 months. If fewer than 12 months are available, then the average volatility of the S&P1500 is used. Source: CRSP. |
| *M&A Deal Characteristics* | |
| CAR | Cumulative abnormal return (%) for the event window (−1, 1) of acquisition announcement, calculated using the market model benchmark method. Benchmark parameters are estimated using value-weighted CRSP index as a proxy for market returns over days (-210,-11). Source: CRSP. |
| Stock Runup | Buy-and-hold return (%) of the acquiring firm's stock from day -211 to -10 of the acquisition announcement date times 100. Source: CRSP. |
| Relative Deal Size | Deal value from SDC scaled by the market capitalization of the acquirer 11 days |

| | |
|---|---|
| | prior to the announcement. Source: SDC Plantinum. |
| % Cash Financed | The percentage of the deal financed with cash. Source: SDC Plantinum. |
| Non-Diversifying Bid | Indicator variable: equals 1 if the target is in the same Fama-French industry with the acquirer. Source: SDC Plantinum. |

## Table B 1 Number of Directorships

This table presents results from multivariate regression analysis of the number of directorships for directors conditioning on whether they are overall winners of national awards, excluding financial and utility firms for fiscal years 2000 to 2013. The dependent variable is the number of directorships a director has. *Distracted_Awd* is an indicator that equals 1 if the independent director is distracted for at least 50% (or 25% if distracted by illness and awards) of the fiscal year and 0 otherwise. A detailed description of the distractive events, distraction periods and requirements on the relative importance of a directorship related to the distractive events is provided in Capturing Preoccupied Directors. *Major committee* is an indicator variable that equals 1 if the director is a nomination, audit, compensation or corporate governance committee member and 0 otherwise. All variable definitions are reported in Appendix A. Standard errors are robust to heteroscedasticity and clustered by director with p-values in parentheses. *, **, *** indicate significance at the 10%, 5% and 1% levels respectively.

| Dependent variable: # of Directorships | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
|---|---|---|---|---|---|---|
| Regression: | Tobit | OLS | OLS | Tobit | OLS | OLS |
| Distracted_Awd | 0.282* | 0.151 | 0.187* | 0.324** | 0.175* | 0.205** |
| | (0.067) | (0.129) | (0.058) | (0.028) | (0.069) | (0.027) |
| Ln(Assets)$_{t-1}$ | 0.298*** | 0.148*** | 0.054*** | 0.296*** | 0.138*** | 0.036** |
| | (0.000) | (0.000) | (0.004) | (0.000) | (0.000) | (0.011) |
| Ln(Tobin's Q)$_{t-1}$ | 0.175*** | 0.081*** | -0.043** | 0.236*** | 0.106*** | 0.006 |
| | (0.000) | (0.001) | (0.024) | (0.000) | (0.000) | (0.685) |
| ROA$_{t-1}$ | -0.432*** | -0.158* | -0.030 | -0.476*** | -0.170*** | -0.049 |
| | (0.006) | (0.069) | (0.577) | (0.000) | (0.001) | (0.126) |
| Board Size$_{t-1}$ | 0.026*** | 0.012** | 0.001 | 0.029*** | 0.013*** | 0.002 |
| | (0.003) | (0.013) | (0.886) | (0.000) | (0.001) | (0.524) |
| Independent Board$_{t-1}$ | 0.323*** | 0.126*** | 0.085*** | 0.335*** | 0.126*** | 0.065*** |
| | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Director Age$_{t-1}$ | 0.024*** | 0.013*** | 0.013*** | 0.031*** | 0.015*** | 0.016*** |
| | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Director Tenure$_{t-1}$ | -0.040*** | -0.017*** | -0.014*** | -0.041*** | -0.017*** | -0.014*** |
| | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Director Ownership$_{t-1}$ | -2.909*** | -0.914*** | -0.863*** | | | |
| | (0.000) | (0.000) | (0.000) | | | |
| Post-SOX$_{t-1}$ | -0.344*** | | -0.175*** | -0.351*** | | -0.155*** |
| | (0.000) | | (0.000) | (0.000) | | (0.000) |
| Observations | 84,109 | 84,109 | 84,109 | 112,328 | 112,328 | 112,328 |
| FE | Ind & Yr | Ind * Yr | Firm & Yr | Ind & Yr | Ind * Yr | Firm & Yr |
| Pseudo R-squared | 0.0310 | | | 0.0309 | | |
| Adjusted R-squared | | 0.070 | 0.168 | | 0.069 | 0.158 |

## Table B 2 Number of Directorships: Difference-in-Difference around Exogenous Changes in Director Busyness

This table presents difference-in-difference estimates of the number of directorships for directors experiencing a distracting event, for fiscal years 2000 to 2013. A treatment director is identified as an independent director who is distracted by awards in the current firm-year, but not by a combination of any events in Table 1 in the prior year within the same firm. The control directors are the remaining independent directors on the board of the treatment directors, who are not distracted by any events in both years. In the pre-treatment year, the number of directorships held by a control director must be within 10% radius of a treatment director in the same firm-year. The model estimated is:

$$y_{i,t} = \beta_0 + \beta_1 Treat_i + \beta_2 Post_t + \beta_3 (Treat_i \times Post_t) + Controls_{i,t} + \alpha_i + \delta_t + u_{i,t}.$$

$Post_t$ is an indicator variable that equals zero in the year prior to being distracted and one in the year of distraction. $Treat_i$ equals one for treatment director-years and zero for control director-years. The coefficient estimate of the interaction term, $\beta_3$, is the difference-in-difference estimate. The controls are the same as in model 1 of Table B 1, but are suppressed for brevity. Standard errors are robust to heteroscedasticity and clustered by director with p-values in parentheses. *, **, *** indicate significance at the 10%, 5%, and 1% levels respectively. Standard errors are robust to heteroscedasticity and clustered by director with p-values in parentheses. *, **, *** indicate significance at the 10%, 5%, and 1% levels respectively.

| Dependent variable:<br># of Directorships | Model 1<br>Tobit | Model 2<br>OLS | Model 3<br>OLS |
|---|---|---|---|
| Treat X Post | 0.024*<br>(0.091) | 0.076*<br>(0.051) | 0.088**<br>(0.042) |
| Treat | 0.455**<br>(0.022) | 0.222*<br>(0.057) | 0.215**<br>(0.047) |
| Post | -0.442***<br>(0.001) | -0.121<br>(0.258) | -0.175**<br>(0.010) |
| Observations | 1,118 | 1,118 | 1,118 |
| FE | Ind & Yr | Ind * Yr | Firm & Yr |
| Controls | | Same as Table B 1 | |
| Pseudo R-squared | 0.0677 | | |
| Adjusted R-squared | | 0.118 | 0.183 |

**Appendix C Director Awards Data**

| Variable | Definition |
|---|---|
| Business Week | "Best Manager" "Best Entrepreneur" "Top Entrepreneur" "Top 25 Managers of the Year" |
| Chief Executive | "CEO of the Year" |
| Forbes | "Best Performing Bosses" "Best Bosses" "Best Bosses for the Buck" |
| Industry Week | "CEO of the Year" |
| Morningstar.com | "CEO of the Year" |
| Time | "Person of the Year" "Time 100"[1] |
| Time/CNN | "25 Most Influential Executives" |
| Ernst & Young | "Entrepreneur of the Year" "World Entrepreneur of the Year" |
| Harvard Business Review | "Best Performing CEOs in the World" |
| Business 2.0 | "50 Who Matter Now" |
| The President | "Presidential Citizens Medal" |

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[1] Strictly speaking, "Time 100" is more about influence and not necessarily achievement. That is, bad examples such as Bernie Madoff were included in the 2009 Time 100 due to his financial fraud. However, I still include it as a source of distraction because it takes time to deal with bad exposure too.

**Appendix D Summary of definitions and sources of distractive events**

| Event | Definition & Source |
|---|---|
| Illness | A director is reported to be sick. Source: Hand-collected from Factiva, LexisNexis, SEC 8-K filings, company websites and Google search. |
| Award | A director becomes the overall winner of a national or global award. Source: Hand-collected. |
| Underperformance (ROA) | Lower industry-adjusted ROA than the prior year. Source: Compustat. |
| Underperformance (stock return) | Lower industry-adjusted stock return than the prior year. Source: CRSP. |
| Financial Misconduct | A firm is covered in the Federal Securities Database analyzed by Karpoff et al. (2013). |
| M&A | An M&A announcement is found in SDC Platinum. |
| Divestiture | A divestiture announcement is found in SDC Platinum. |
| Turnover | A person is a director (CEO) in the firm in the prior year but not in the current year. Source: BoardEx, Execucomp. |
| Financial Distress | A firm has a ratings downgrade (from Compustat), Chapter 11 filing (from UCLA-LoPucki Bankruptcy Research Database) or delisting due to price below an acceptable level, having insufficient capital, surplus, and/or equity, having insufficient (or non-compliance with rules of) float or assets, filing delinquencies and delays, non-payment of fees, or not otherwise meeting exchange's financial guidelines for continued listing (from CRSP) in the year. |

# Appendix E Attention and Distraction

This figure graphs the focus of a director on a firm against the time elapsed since he/she becomes ill. The variable on the vertical axis, *Focus*, is proxied using factor analysis aggregating *Attended < 75% of Meetings*, *# of Directorships* and *Busy Committee*.