

Who Chooses Board Members?*

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ABSTRACT

We exploit a recent regulation passed by the US Securities and Exchange Commission (SEC) to explore the nomination of board members to US publicly traded firms. In particular, we focus on firms' use of executive search firms versus allowing internal members (often simply the CEO) to nominate new directors to serve on the board of directors. We show that companies that use search firms to find board members pay their CEOs significantly higher salaries and significantly higher total compensations. Further, companies with search firm-identified directors are significantly less likely to fire their CEOs following negative performance. In addition, we find that companies with search firm-identified directors are significantly more likely to engage in mergers and acquisitions and to see abnormally low returns from this M&A activity (CEO compensation and monitoring along with acquisition strategy being perhaps the most attributable to board decision-making). We then instrument the endogenous choice of using an executive search firm when choosing directors through the varying geographic distance of companies to executive search firms. Using this instrumental variable framework, we show search firm-identified directors' negative impact on firm performance, consistent with firm behavior and governance consequences we also document.

JEL Classification: G30, G34, G38

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The principal-agent problem in economics arises because of incomplete and asymmetric information when a principal hires an agent to pursue the principal's interests, along with the inability to write complete contracts. For example, shareholders, the owners of a firm, hire a CEO to manage the firm on their behalf. Left unmonitored, CEOs may shirk duties and take actions that may not maximize shareholder value. However, shareholders have several tools to monitor CEOs and mechanisms to make sure that they will act in the best interests of shareholders. Perhaps the most important of these mechanisms is the board of directors. Boards are charged with two basic but crucial functions: monitoring and evaluating managers and their decisions (Fama and Jensen, 1983). In these functions, boards ensure that CEOs and other managers act in the shareholders' best interests. How directors make their way onto board is thus of obvious importance.

Evidence on how directors are identified is limited, largely due to the unavailability of data. In 2003, however, the US Securities and Exchange Commission (SEC) passed a regulation requiring companies to explain their director nomination process and to disclose the sources of all new directors (the new regulation became effective in 2004).¹ These disclosures permit us to examine board power dynamics more precisely and to investigate under what circumstances firms use insiders versus outsiders to identify their directors. We can then determine whether the sources of board nominees are related to important firm characteristics that affect performance. Most important, we can investigate whether the monitoring incentives, as well as governance ability, of the newly appointed directors depend on the source of their nomination.

We focus on companies' use of executive search firms versus allowing internal members (often simply the CEO) to nominate new directors to serve on the board of directors. We underscore the importance of these "nomination rights," because under the plurality system used by most US firms, nominees often require only a single "yes" vote to win election to the board, making "nomination" the sole true determinant of board composition.

We hand-collect data for S&P 1500 firms starting in the year of the regulatory change, 2004, for the five-year period through 2008. These firms brought on 5,866 new

¹ See <http://www.sec.gov/rules/final/33-8340.htm> for more about the new disclosure regulation.

directors over this period, 4,963 of which were independent directors. Of these independent directors, 23.9% were identified through the use of an executive search firm. The only other agents who were not members of the executive team or board but also nominated independent directors were large (block) shareholders, who nominated 8.5% of independent directors.

We address a number of first-order governance questions using these unique data. Because we are the first to use these data, we begin by describing both the nomination data provided and the level of detail we can obtain on each director's nomination process. From there, we move the focus to executive search firms. These executive search firms play a key role in our analysis because they are the dominant form of (potentially) arm's-length board nomination by firms (that is, not nominated by a related firm-party). In other words, when firms decide to nominate new board members from outside, they generally use executive search firms.

We describe what executive search firms are and where they are located in the United States (including their branches). Next, we describe the firm and board characteristics of those firms (and boards) that use executive search firms to nominate directors. Three of the largest executive search firms in our sample are: (i.) Korn Ferry, headquartered in California, with 21 offices throughout the United States; (ii.) Spencer Stuart, headquartered in Illinois, with 15 US offices; and (iii.) Egon Zehnder International, Inc., headquartered in New York, with 9 US offices. These firms seek out and provide a menu of suitable candidates from which the board then chooses to nominate new directors.

We find that certain firms are much more likely to use directors identified by executive search firms. They are significantly larger, being twice as likely to be in the S&P 500 Index. They also have significantly lower sales growth and are significantly more likely to pay dividends. They are spread out evenly across all industry sectors.

We next study the more interesting question of the governance and value implications of having these search firm-identified directors as opposed to directors nominated from within. Companies that use search firms to identify board members pay their CEOs significantly higher salaries and significantly higher total compensations. Further, companies with such directors are significantly less likely to fire their CEOs

following negative performance. In addition, we find that companies with search firm-identified directors have significantly lower return on assets (ROA), are significantly more likely to engage in mergers and acquisitions (M&A), and see abnormally low returns from this M&A activity.

We also seek to pin down a causal mechanism between directors hired through search firms and these negative firm outcomes. To do this, we uncover an exogenous factor that drives companies' use of search firms: the varying geographic distance of companies to executive search firm offices. We hypothesize that companies are more likely to employ executive search firms if they are located nearby, which allows companies and search firm to have more meetings and less costly interactions regarding the slate of potential directors. As long as a portion of this geographic proximity is unrelated to characteristics that may drive firm performance, which we argue is very reasonable,² we can use this in a two-stage least squares (2SLS) instrumental variable framework to identify the causal impact of directors hired through search firms on firm performance.

Upon doing this analysis, we find first, in the first stage of the 2SLS, that geographic proximity to a search firm is a large and significant determinant of a company's decision to use that search firm. Using solely the piece of search firm choice that is based on geographic closeness, we then show that the orthogonal piece is a significant predictor of lower profitability that we document in the paper. This gives support to the causal interpretation of search firm directors.

The remainder of the paper is organized as follows. Section I describes the setting and related literature. Section II describes the data. Section III presents the main regression results. Section IV examines the instrument and additional results. Section V concludes.

² We in fact hand-collect the founding dates of search firm branch office locations and run tests in which we solely examine the decisions of companies that were established decades after the search firm offices to deal with the reverse causality of search firm office location.

Section I. Background

Boards of directors look after shareholders' interests by monitoring CEOs and advising them on corporate affairs. The monitoring function is important: in its absence, CEOs may shirk duties and take actions that can reduce shareholder value. Moeller, Schlingemann, and Stulz's (2005) results emphasize the importance of the board's monitoring role. They report that management may destroy shareholder value via acquisitions if the firm is overvalued and management has gained discretion due to the firm's overvaluation. Left unmonitored, CEOs may also increase their perquisite consumption, which may subsequently reduce shareholder value. Yermack (2006) confirms this, finding a negative relationship between the announcements of CEO perquisite consumption and stock returns. Management may also alter the schedule of investment projects at the expense of long-term shareholder value to meet short-term expectations. Graham, Harvey, and Rajgopal (2006) report that managers are willing to delay positive net present value (NPV) projects in order to meet the market's earnings estimates. We have witnessed epic corporate failures (such as Enron, Tyco, and Worldcom) in the past decade. Boards have been blamed for failing to adequately monitor CEOs in these and other corporate failures. In response to these and other corporate failures, regulatory agencies, such as the SEC, and the stock exchanges have passed regulations that tighten the grip on CEOs and boards to prevent similar corporate failures in the future. The absence of the monitoring function can lead to shareholder value destruction, and how a board performs this function is partly affected by how the board is composed.

The literature shows that board composition has value relevance for shareholder value. Byrd and Hickman (1992), for example, find that the market's reaction to merger announcements by firms with independent boards is less negative, implying that independent directors are safeguarding shareholder value and that CEOs are less likely to engage in value-destructive acquisitions when boards are independent. Similarly, Brickley, Coles, and Terry (1994) report positive stock price returns to announcements of poison pill adoptions when boards are independent. CEOs are more likely to lose their job because of poor performance when boards are composed mainly of independent

directors (Weisbach, 1988). Hermalin and Wiesbach (1988) find that independent directors are more likely to be added to boards following poor performance. Rosenstein and Wyatt (1990) report that the market reacts significantly positively to announcements of outside director appointments, implying that board composition is important for shareholder value. Board composition arguably also affects firm performance. The literature, however, mostly finds a weak relationship between board composition and firm performance. For example, the results of Bhagat and Black (2002) do not indicate that greater board independence enhances firm performance. However, recent studies report a positive effect of board independence on firm performance. For example, Knyazeva, Knyazeva, and Masulis (2011), using local director pool as an instrument, report positive effects of board independence on firm performance, CEO compensation, and CEO turnover.

The board is not a homogenous body. Boards may comprise independent directors, gray directors, and inside directors, each class having its own incentives and desired levels of monitoring the CEO. Although an independent board is less likely to be controlled by the CEO, having a board composed of mainly independent directors does not necessarily imply effective CEO monitoring.

The literature shows that board independence can be affected by, for example, board interlocks, directors' connectedness to the CEO through social or educational ties, and the CEO's involvement in the selection of directors. When a board has two or more members who also share seats on another firm's board, CEO compensation tends to be higher and CEO turnover probability decreases (Fich and White, 2003). Hwang and Kim (2009) examine directors' social ties to CEOs and show that including social ties in the definition of director independence significantly reduces board independence. They also find that boards that are not socially and conventionally independent from their CEO tend to reward the CEO with a high compensation package and are less likely to remove the CEO because of poor performance. The board's independence and its effective monitoring ability can be hampered if the CEO hand-picks directors to the board. Although some studies indicate that a friendly board is sometimes optimal (see, for example, Adams and Ferreira, 2007), Shivdasani and Yermack (1999) find that the market's reaction to announcements of independent director appointments is

significantly lower when the CEO is involved in the selection process. Shivdasani and Yermack argue that CEOs reduce boards' monitoring intensity by being involved in the selection of directors.

Every board is composed of individuals with different characteristics and skill sets. If certain directors share similar characteristics, views, or skills, however, then collectively the board's view or its monitoring ability of the CEO will be affected. Several studies indicate that director types have meaningful effects on how boards monitor their CEO. For example, Adams and Ferreira (2009) find that female directors allocate more time in monitoring CEOs and that, in well-governed firms, this increased monitoring may negatively affect firm performance. Masulis, Wang, and Xie (2012) study foreign directors in US firms. They find that foreign directors are poor monitors, and they report a negative relationship between the presence of foreign directors on the board and firm performance. Fich and Shivdasani (2006) show that busy directors – those with three or more outside directorships – are not effective monitors: their presence is associated with poor firm performance and corporate governance. Masulis and Mobbs (2011) find positive effects of inside directors with outside directorships on shareholder value. They report that having an inside director who has an outside directorship on the board is associated with better firm performance and acquisitions and a lower likelihood of earnings management. The literature, overall, shows that board composition affects the board's monitoring ability, which subsequently affects performance. In this respect, it is crucial to understand how directors are recruited to the board.

There is limited evidence in the literature on how directors are nominated. This is partly due to the unavailability of data. Studies on director recruitment generally rely on surveys or interviews. For example, O'Neal and Thomas (1995) interview directors and report that the CEO and the chairman are influential in director selection and that personal networks of directors play an important role in identifying suitable candidates. Mace's (1971) discussion of how directors are selected also reveals the CEO's influence in the director selection process. Similarly, the survey results of Lorsch and MacIver (1989) illustrate the control that CEOs have in selecting directors. Shivdasani and Yermack (1999) also report results consistent with the idea that CEOs effectively hand-

pick nominees. Our paper differ from others that examine the selection of directors in that we identify the sources of director nominations and examine how directors recommended by executive search firms affect boards by studying CEO compensation and turnover, M&As, and firm performance.

Although there is limited evidence in the literature on how search firms are involved in the director selection process, there is a small but growing literature on intermediaries such as compensation consultants. Dasgupta and Ding (2010) examine how executive search firms affect CEO compensation in a theoretical setting. They argue that the weakening of the firm's internal labor markets has helped search firms to flourish, which in turn has increased CEO pay. Canyon, Peck, and Sadler (2009), Armstrong, Ittner and Larcker (2010), Cadman, Carter, Hillegeist (2008), and Murphy and Sandino (2010) examine the effect of compensation consultants and report that their use is associated with higher CEO pay. Rajgopal, Taylor, and Venkatachalam (2012) also report that the use of compensation consultants is associated with higher CEO pay. However, they show that firms that use compensation consultants report better operating and stock price performance. Their results contrast Jensen, Murphy, and Wruck (2004), who argue that CEOs' use of compensation consultants is an attempt to extract rents from shareholders.

Although the literature shows that CEOs remain influential in the selection of directors, their apparent involvement has been declining owing to recent governance reforms. Shivdasani and Yermack (1999) assume that CEOs are involved in the director selection process if they are on the nominating committee, if the firm has one. If there is no nominating committee, then they assume that CEO is involved in director selection by default. CEOs are no longer allowed to sit on the nominating committee, and almost every firm in our sample now has a nominating committee, making it impossible to determine CEO involvement using Shivdasani and Yermack's methodology. The 2003 rule change, however, requires firms to describe how they identify board nominees, allowing us to determine the source of director nomination.

Our study is related to papers that examine director types and how director types are associated with certain board outcomes. In this respect, we identify directors recommended by executive search firms as another director type and investigate how

their presence on the board affects the CEO and the firm. Our paper is complementary to studies that examine board independence and director characteristics and stresses the need to identify how directors are nominated to the board to determine their monitoring incentives of the CEO. We also contribute to the literature by examining how firms identify their directors after the recent corporate governance reforms. Although executive search firms have been involved in director selection for more than 50 years (Dasgupta and Ding, 2010), their involvement in this process is mostly overlooked in academic studies. We try to fill this gap in the literature and highlight the importance of intermediaries in identifying suitable board candidates.

Section II. Data

In this section, we describe our data collection process and variables and provide summary statistics. The data in this study are collected from several sources. Our primary data on directors recommended by executive search firms are hand-collected from proxy statements.

On November 10, 2003, the SEC adopted a rule requiring firms to disclose more information about their director nomination process. The new disclosure requirements became effective on January 1, 2004. Because we need information on directors located by search firms, our sample period starts on January 1, 2004. To collect data on directors identified by search firms, we start with the 2006 list of S&P 1500 firms and follow our sample firms from 2004 to the end of 2008. We choose the 2006 list of S&P 1500 firms because it is in the middle of our sample period, which ensures that we do not lose many firms in the sample owing to bankruptcies or mergers.

Using proxy statements, we identify who recommends a director to the board or to the nominating committee. The sources of director nominations are diverse and include search firms, the CEO, the chairman, other executives of the firm, major shareholders, independent directors, and the nominating committee.

We specifically look for a new director appointment (or nomination) in proxy statements. We also compare proxy statements in a given year to the previous year's

proxies to identify midyear director appointments. The information about the source of director nomination is provided either in the proxy in a special part about the firm's director nomination process or in director biographies. Below we provide an example from Advance Auto Parts, Inc.'s 2004 proxy statement for the nomination of its new independent director, John C. Brouillard:

“Our nominating and corporate governance committee retained a third-party recruiting firm, which identified Mr. Brouillard, evaluated his credentials, interviewed him and recommended him for consideration by the nominating and corporate governance committee.”

For each year that we observe a new director nomination or appointment, we obtain the source of the nomination from the proxy along with other related information about the board and CEO characteristics, which we define below. It is possible that a director may be recommended to the board by more than one party. For example, both a search firm and the CEO may recommend the same person to the nominating committee. Whenever we observe recommendations for the same person from two (or more) different parties, we give priority to insiders (for example, the CEO) and treat the recommendation as having coming from insiders. This is a conservative approach and should work against our finding significant results. In the analysis, we focus only on independent directors purely nominated by search firms.

It is possible that firms are not completely forthcoming about the sources of director nominations. Companies may use vague statements like a “search firm may be used.” Below we provide an example from Affiliated Computer Services, Inc.'s 2008 proxy statement:

“The Nominating and Corporate Governance Committee generally identifies director nominees through the personal, business and organizational contacts of existing directors and management. However, the Nominating and Corporate Governance Committee may use a variety of sources to identify director nominees, including third-party search firms and stockholder recommendations.”

We read all the statements in proxy statements about how a director is identified or how the board identifies a director, and whenever the source of the nomination is unclear, we make a conservative judgment when assigning it to a source category. Vague statements, such as the example above, are generally assigned to the nominating committee category. Our assumption is that in such cases, the nominating committee identifies the director. We label such vague statements “ambiguous appointments” and identify them with a dummy variable. In our analysis, we use the full sample of independent director appointments, which includes ambiguous appointments. Our results are robust, however, only if we restrict our sample to the appointments in which the source of the director nomination is clear.

From proxy statements, we collect information about the CEO and the board. Specifically, we collect the following data: whether a nominee is recommended by a search firm, the CEO, another insider, an independent director, a major shareholder, or the nominating committee or joined the board through a merger. We identify the current CEO and chairman and classify each director as an independent, gray, or inside director. We determine the CEO’s starting year and calculate his or her tenure as CEO. Director gender and age are also obtained from proxy statements. We identify whether the CEO is from the founding family using proxy statements, company websites, or other Internet sources. We obtain the number of shares owned by each director and calculate his or her percentage ownership. Finally, we determine if there is an independent director on the board who owns at least 5% of the shares.

Using the director nomination data from proxy statements, we construct two key variables. The first is the percentage of search firm-recommended independent directors on the board. To do this, we start with the first year of a new independent director observation and calculate the percentage of search-recommended directors on the board. If we observe at least one new independent director nomination in a given year, but none is recommended by a search firm, then the percentage variable is simply 0. If there is no new independent director recommended by a search firm on the board the following year (or the departure of a search firm-recommended director), we assign the search-firm director percentage from the current year to that year. Once we observe a

new independent director recommended by a search firm on the board or a departure of a search firm-recommended independent director, we update our search-firm director percentage. Our second variable is a dummy variable for the presence of at least one search firm-recommended independent director on the board. If there is at least one independent director on the board recommended by a search firm, the dummy is then equal to 1, and 0 otherwise. Again, we control for departures and new appointments. We should note that our variables probably underestimate the true number of search firm-recommended directors on the board. As noted earlier, the SEC rule came into effect in 2004, and it is only after 2004 that we are able to identify the sources of director nominations. So it is quite possible that during our sample period a board has search firm-recommended directors appointed before 2004.

We then merge our search firm data with several other databases. Accounting data come from Compustat, compensation data from Execucomp, governance data from RiskMetrics, and M&A data from SDC. We construct several variables from these databases. We list and explain our variables in Appendix Table AI.

We obtain a list of executive search firms operating in the United States as of 2004 from Kennedy Information, LLC. These search firms specialize in identifying board members. The list includes the headquarter city and all the branches associated with each search firm. To construct our instrumental variable (described in more detail in Section IV), we first calculate the distance of each firm's headquarters to every search firm office and headquarters and then create an indicator variable that equals 1 if there is a top-search firm (the first six search firms with the most offices plus the headquarters) within a 100-kilometer radius of the firm's headquarters.

We present the search firms with the most offices and some statistics in Table I. The largest search firm by branch number is Korn/Ferry International. Korn/Ferry International has 21 offices, including its headquarters. The next search firm is Heidrick & Struggles International, Inc., with 16 offices, including its headquarters. In Panel B, we divide the search firm locations into regions. Most search firms are located in the South (169 search firms), followed by the Northeast (149 search firms). Overall, the 2004 list has 395 distinct search firms. Most search firms have no offices other than their

headquarters. There are 138 such offices, and in total, there are 533 search firm offices and headquarters in the 2004 list.

We present director-related summary statistics in Table II. Panel A shows that there were 5,866 new director nominations between 2004 and 2008 and that 1,239 of these were recommended by search firms (21.1%). In total, out of 4,963 new independent director nominations, 1,184 independent director recommendations came from search firms (23.9%).

Panel B shows that, out of the all sample firms with proxies, 764 firms had at least one new director in 2004. There were 623 firms with new directors in 2008. The number of firms with new directors ranges between 623 and 764 between 2004 and 2008. It seems that about 46% of the firms had a new director in a given year during our sample period and that about 84% of new directors are independent directors.

Panel C provides the number of firms that used a search firm out of the firms that had a new director. For example, out of 764 firms that had a new director in 2004 (Panel B), 139 firms in 2004 used a search firm. Over the sample period, the number of firms that used a search firm was fairly stable (between 113 and 139). The next column shows the number of director nominations per year, and the last column tells how many of the new directors in Column 2 were independent directors. For example, 764 firms had a new director in 2004 (Panel B), and 139 of them used a search firm to identify 275 directors. And 268 of the 275 directors that were recommended by search firms were independent directors.

We next report statistics related to the sources of director nominations. Interestingly, we find that 10.1% of all inside director nominations came via search firms, meaning that search firms recommended an executive to the board. Search firms on average recommended 22.7% of independent directors to the board (based on 5,219 independent director nominations that also include M&A related nominations). CEOs are also influential in recommending independent directors to the board: 22.3% of independent director nominations came from CEOs. Remember that not all firms in our sample are clear about how they identify their directors and that we were conservative in assigning sources (when a director nomination was not clear, we assigned it to the

nominating committee). Of all independent director nominations, 25% came via the nominating committee.

As a final set of statistics, we examine the median director age and the fraction of female nominees in Panel E by nomination source. Search firms appear to have recommended younger people and more females to the board. It is possible that the use of search firms is confined to specific industries. We explore this in Table III. Table III provides the industry distribution of our sample firms according to the Fama-French 48 industry classification. The table provides the number of firms in each industry that used a search firm at least once during the sample period. We do not observe that search firm use is confined to certain industries.

We provide summary statistics for our sample in Table IV by using all available data. Board and governance characteristics are presented in Panel A. There are 5,277 firm-year observations for search firm director indicator (SFID indicator). In about 27.6% of the observations, we observe at least one search firm-identified independent director. On average, 6.3% percent of the independent directors on the board are recommended by search firms, suggesting that the use of search firms is fairly common. Conditioning on the presence of a search firm director, the search firm director percentage on the board increases to 21.5%. The typical firm has a board size of 10, and 98.2% of the boards are independent (>50% independent directors). CEO/chairman duality is observed in about 60% of the firm-year observations, and the average CEO ownership is 3.8% (the median is 0.9%). The typical CEO has a tenure of seven years. About 15.6% of the CEOs are related to the founding family. We also observe that there is an independent blockholder director on about 17.6% of the boards.

The average CEO salary is \$0.79 million, with the average total compensation being \$5.9 million (Panel B). The average firm is large, with a market capitalization of over \$10 billion (Panel C). The median firm, however, is much smaller, with a market value of \$2.3 billion. ROA is fairly high, with 9.6% for the average firm. We observe a Tobin's Q of 1.95, R&D expenditures of 3.3%, and sales growth of 11.4% for the average firm. About 45% (47%) of the firms in the sample had a negative excess return in the current (previous) year. Overall, the summary statistics for our sample firms are similar to the ones from previous studies.

We compare firm-year observations in which we observe a search firm-identified independent director to the rest of firm-year observations in Table V. Panel A is for board and governance characteristics. Firms that use search firms have larger boards, more independent directors, younger CEOs, lower CEO tenure, and a lower probability of a non-CEO independent director blockholder than the firms that do not use a search firm. The governance index is statistically higher for the firms that use a search firm. CEO ownership is much lower in companies that use search firms. We also note that CEOs are less likely to be related to the founding family when a search firm is used.

In Panel B, we provide statistics for CEO compensation. Salary and total compensation is much higher in firm-year observations in which we observe a search firm-identified independent director. The average salary is \$0.89 million when a search firm is used, and \$0.76 million when not used. Similarly, total compensation is \$7.45 million in firms that use a search firm, compared to \$5.42 million in firms that do not.

Panel C shows that firms that use a search firm are much larger firms. For example, the market value of equity is \$12.1 billion when a search firm is used, and \$8.9 billion when not used. We do not observe a difference with respect to ROA. However, Tobin's Q is statistically different between firms that use a search firm and firms that do not. Sales growth, however, is statistically lower for the firms that use a search firm (9.2% vs. 12.3%). Also, fewer firms have negative excess stock price return when they have a search firm-identified independent director on the board.

Section III. Results

In this section we test the impacts of having a search firm-identified director on firm governance and behavior. Given that we are testing the impact of certain board members on firm behavior, it is best to choose governance characteristics and decisions in which the board is likely involved. We thus begin by testing the impact of directors found through search firms on CEO compensation.

The results of these tests are presented in Table VI. The dependent variables are the log of CEO salary or the log of total CEO compensation. We use both measures,

since the board sets both of these, and part of the CEO compensation is the imputed value of options and restricted stock grants (necessarily more uncertain), whereas salary is more certain and straightforwardly measured, given both its horizon and security structure. The independent variable of interest is *SFID Percentage*, which is the percentage of board members found using an executive search firm.³ We use a number of CEO-, firm-, and board-level characteristics to control for other potential determinants of the CEO's compensation, all measured in the fiscal year prior to CEO compensation. These include, for the CEO: CEO tenure, whether the CEO is chairman of the board, whether the CEO is a member of the founding family, CEO ownership in the firm (along with ownership squared), and CEO age. For the board, they are: board size, a dummy for whether the board is majority independent, and a dummy for whether any of the independent directors are blockholders in the firm. And for the firm, they are: the Gompers, Ishii, and Metrick (2003) governance index, firm size, book-to-market, profitability, sales growth, R&D, capital expenditures, a dummy for whether the firm paid dividends the past year, past returns, stock return volatility, and a dummy for whether the firm is in the S&P500 Index.⁴ Last, we include industry and year fixed effects to control for any variation in compensation driven by a given industry or a given year in our sample. We also adjust all standard errors for clustering at the firm level.

All the columns from Table VI deliver the same message: Having more directors nominated by search firms is associated with significantly higher CEO compensation. *SFID Percentage* has a significant coefficient in each specification, for both salary and total compensation. In the full specifications, the magnitude on search firm-identified directors for salary (total compensation) is 0.262, $t=2.54$ (0.426, $t=3.42$). To give an idea of magnitude, having a one standard deviation larger percentage of the board made up of search firm-identified directors (roughly switching out one non-search firm director for one search-firm director) results in a 1.1% higher CEO salary and 1.4% higher total compensation.

³ We run all tests in the paper using a dummy variable version of search firm director board membership instead of the continuous version. The magnitude and significance of the results are nearly unchanged and are available on request.

⁴ Given that our sample consists of all firms in the S&P 1500 Index, this dummy is a distinction between the 500 and 1500 index constituents.

Table VII provides complementary evidence. Here we examine the performance sensitivity of CEO departures when more search firm-identified directors are on the board. The dependent variable in these regressions is a dummy variable equal to 1 if the CEO departed in a given year. We use the same control variables that we use in Table VI along with two new interaction variables. The independent variable of interest is now the interaction of poor returns and percentage of search firm-identified directors. The hypothesis is that, given that boards with directors nominated by search firms appear to pay CEOs more, they may also be more hesitant to fire CEOs even in the face of poor performance. This is exactly what we see in Table VII. The interaction between poor returns and the percentage of search firm-identified directors is negative and significant, -1.736 ($t=2.15$). This suggests that boards with directors identified by search firms are significantly less likely to fire a CEO following poor performance.

In Table VIII, we move on to another important decision made by boards of directors: that of the acquisitions policy of the firm. This is widely seen as one of the board's most important functions, and it can obviously have large potential value implications (positive or negative) for the company. In Panel A of Table VIII, we regress whether the firm had any M&A activity in the year on the percentage of search firm-identified directors on the board and controls (the same controls as used in Tables VI and VII). Columns 1 and 2 both show that the greater the percentage of search firm-identified directors on a company's board, the more M&A activity they engage in. For instance, the coefficient on *SFID Percentage* in Column 2 of 0.578 ($t=3.04$), implies that a one standard deviation higher percentage of search firm-identified directors on the board is associated with an increase in the amount of M&A activity by nearly 6 percentage points (mean of roughly 18%), or more than a 30% increase.

In Panel B, we explore whether this increased M&A activity appears to be value-enhancing or value-destroying for the firms with more search firm-identified directors. To do so, we regress acquirer merger announcement returns from day $(-2,2)$ on the percentage of search firm-identified directors at the acquiring firm. The mean acquirer announcement return for our sample (S&P 1500 firms) over our time period is 49 basis points (similar to that found in Masulis, Wang, and Xie (2007)). From both Columns 1 and 2, *SFID Percentage* is negatively related to this announcement return. In other

words, the more search firm-identified directors on the board of the acquiring company announcing the merger, the lower the announcement return. The impact, while marginally statistically significant, is quite large economically. For instance, the coefficients in Columns 1 and 2 imply a decrease in announcement return of between 1.7% and 2.6% (from a mean of 49 basis points).

The evidence in Tables VI–VIII is consistent with search firm-identified directors being associated with significantly poorer governance of the companies of which they oversee. Importantly, we focus on precisely those decisions over which boards are unambiguously involved: setting CEO compensation, deciding on the turnover of the firm, and advising on the M&A decisions of the company. Besides simply being involved, these three board decisions are arguably among the most important that boards make from a firm-value perspective, and all appear significantly related to the presence of search firm-identified directors.

Section IV. Instrument

Although the relationships documented in Section III are suggestive, the main hurdle we face in the analysis is pinning down a causal mechanism between search firm-identified directors and these negative firm outcomes. To do this, we need to find an exogenous factor that drives companies to use search firms. In other words, we need to find some part of the reason why a company decides to use a search firm to appoint its directors that has nothing to do with an unobservable characteristic that might also be driving the relationships we document above (but not work through search firm-identified directors). To be clear, the instrument need not be the *entirety* of the reason why, nor even the most important part of the reason why; it simply needs to be some part of a company’s decision to use a search firm when appointing a director. Also, what we are instrumenting for is the decision whether to use a search firm. As we are comparing to other firms that are appointing new directors, the *act* of new director appointment is being conditioned upon, so it is only how this new director is found that is being instrumented for.

We then hypothesize that distance from an executive search firm may affect companies' use of executive search firms. The idea is that companies are more likely to employ the use of search firms if they are located near the firm, as this proximity allows the company and search firm to have more meetings and less costly interactions regarding the slate of potential directors. Again, as long as a portion of the decision of whether to use an executive search firm to find a new director is driven by distance to an executive search firm, we can use this in a two-stage least squares instrumental variable framework to identify the causal impact of search firm-identified directors on future firm governance behavior and performance.

In Panel A of Table IX, we regress ROA on *SFID Percentage* along with other control variables (controlling for all other determinants and controls we have been including up to this point, including year and industry fixed effects) and find that ROA is decreasing in the percentage of search firm-identified directors on the board. This is in line with the evidence presented in previous tables. However, as noted above, this result is suggestive, and we need to establish that *SFID Percentage* affects firm performance. In Table IX, Panel B, we show the first stage of 2SLS to explore whether distance to a search firm really does affect a company's decision to use a search firm (again controlling for all other determinants and controls we have been including up to this point, including year and industry fixed effects). The dependent variable in the regression is *SFID Percentage*, and the independent variable of interest is *Search Firm within 100 kilometers*, a categorical variable equal to 1 if the firm has an executive search firm branch within 100 kilometers, and 0 otherwise. Both columns of Table IX, Panel B, deliver the same message: having an executive search firm near the company results in the company being significantly more likely to use an executive search firm when replacing directors. The magnitude of this effect is large. Companies with a search firm nearby have 34% more directors found by executive search firms (coefficient of 2.1%, $t=2.97$, from a mean of 6.3%).⁵

In the second stage, we then use this piece of the search firm choice that is based on geographic closeness (the instrumented piece). The results are in Table IX, Panel C.

⁵ We also use continuous versions of this variable-distance to a search firm and $\log(\text{distance to a search firm})$ and both yield the same large and significant relationship. We choose the dummy variable specification for its ease of interpretation.

We examine the impact of search firm-identified directors on company profitability (ROA). From Table IX, Panel C, the orthogonal piece of search firm directors is a significant predictor of lower profitability, consistent with the results provided in Section III. This 2SLS procedure and result give support to the causal interpretation of search firm-identified directors on firm behavior and performance.⁶ In an unreported table, we repeat the analysis in Table IX with Tobin’s Q and obtain similar conclusions.

Section V. Conclusion

Studying boards and understanding how they are constructed is a first-order question facing corporate governance, since boards arguably represent the most important device through which agency problems are mitigated between managers and shareholders. We exploit a recent regulation passed by the SEC to explore the nomination of board members to US publicly traded firms. In particular, we focus on firms’ use of executive search firms versus simply permitting internal members (often simply the CEO) to nominate the new directors to serve on the board. We show that companies that use search firms to find board members pay their CEOs significantly higher salaries and significantly higher total compensations. Further, companies with search firm-identified directors are significantly less likely to fire their CEOs following negative performance. In addition, we find that companies with search firm-identified directors are significantly more likely to engage in M&A and that they see abnormally low returns from this M&A activity.

We instrument the endogenous choice of using an executive search firm when choosing directors through the varying geographic distance of companies to executive search firms. We hypothesize that companies are more likely to use executive search firms if they are located near the firm, as this proximity allows the company and search

⁶ One remaining worry is that the executive search firms may simply locate where they think they’ll generate business from existing firms. To address this, we actually hand-collect the founding dates of search firm branch office locations and run tests in which we solely examine the decisions of companies that were established after (mean of over 10 years after) the search firm offices to deal with the reverse causality of search firm office location. The coefficient in the second stage of the 2SLS on instrumented search firm percentage is -0.758 ($t=3.32$), even larger than that in Table IX.

firm to have more meetings and less costly interactions regarding the slate of potential directors. We show that in a two-stage least squares instrumental variable framework the causal impact of search firm-identified directors on firm performance, consistent with firm behavior and governance consequences we also document.

The future of corporate governance hinges on our understanding of the inner workings of boards as agency cost-moderating devices. Our study pushes forward the understanding of boards' roles in governing corporations, specifically enhancing our understanding of power dynamics within the board. However, more needs to be done in this vein, as any push toward optimal governance frameworks needs to have design implications for monitor (that is, board director) choice.

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Table I - Search Firms

We provide search firm-related statistics in this table. Panel A shows the search firms with most offices based on the 2004 data obtained from Kennedy Information, LLC. The second column, State, is the state of the main office, and the number of offices (including the main office) is provided in the last column in Panel A. Panel B breaks down search firms (main office and branches) by region.

Panel A: Search Firms with Most Offices

Rank	Search Firm	State	Offices (Main + Branch)
1	Korn/Ferry International	CA	21
2	Heidrick & Struggles International, Inc.	IL	16
3	Spencer Stuart	IL	15
4	Boyden	NY	12
5	Stanton Chase International	IL	10
6	Egon Zehnder International, Inc.	NY	9
7	Furst Group	IL	8
8	Hudson Highland Group, Inc.	NY	8
9	Signium International, Inc.	IL	7
10	Cook Associates, Inc.	IL	6
11	CTPartners	NY	6
12	Dick Wray Executive Search	CA	6
13	The Cassie Shipherd Group, LLC	NJ	6
14	Battalia Winston International	NY	5
15	Executives Unlimited, Inc.	CA	4
16	The Alexander Group	TX	4
17	The Elliot Group, LLC	NY	4
18	CCL Medical Search	NY	3
19	Levin & Company, Inc.	MA	3
20	Mancino Burfield Edgerton	NJ	3
21	System 1 Search, Inc.	CA	3

Panel B: Regional Distribution

Region	Number of Main Offices	Number of Branches	Total
Northeast	113	36	149
Midwest	69	20	89
South	120	49	169
West	93	33	126
Total	395	138	533

Table II - Sample Characteristics

We report director nomination summary statistics in this table. The sample period is from 2004 to 2008. Panel A provides statistics on all director nominations categorized by nomination type, whereas Panel B breaks down the total number of nominations by years. We focus on search firms in Panel C and provide search firm-identified new director nominations broken down by years. Further details about the sources of director nominations are provided in Panel D. The rows are the sources of new director nominations, and the columns represent director type. Last, we provide the median age and the fraction of female director nominations by search firms in Panel E and compare the numbers to nominations by other sources (all the sources other than search firms). ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels when comparing means and medians.

Panel A: All Director Nominations

	Full Sample	Nominations By	
		Search Firm	Others
Total Number of New Director Nominations	5,866	1,239	4,627
Less Number of New Inside and Gray Director Nominations	647	55	592
Less Number of Merger Related New Independent Director Nominations	256	0	256
Total Number of New Independent Director Nominations	4,963	1,184	3,779

Panel B: Director Nominations by Years

Year	Number of Firms with New Directors	Number of New Director Nominations	Number of New Independent Director Nominations
2004	764	1,333	1,153
2005	694	1,155	978
2006	722	1,227	1,012
2007	653	1,086	899
2008	623	1,065	921
2004-2008	3,457	5,866	4,963

Panel C: New Director Nominations by Search Firms

Year	Number of Firms That Used a Search Firm	Number of New Director Nominations by Search Firms	Number of Independent Director Nominations by Search Firms
2004	139	275	268
2005	120	222	210
2006	132	260	244
2007	120	240	229
2008	113	242	233
2004-2008	624	1,239	1,184

Panel D: Source of Nomination

Source	Director Type		
	Inside (537)	Gray (110)	Independent (5,219)
Fraction Recommended by a Search Firm	0.101	0.009	0.227
Fraction Recommended by the CEO	0.041	0.073	0.116
Fraction Recommended by Other Executives	0.015	0.027	0.049
Fraction Recommended by an Independent Director	0.034	0.127	0.223
Fraction Recommended by a Major Shareholder	0.024	0.255	0.085
Fraction Nominated Because of a Merger	0.067	0.445	0.049
Fraction Recommended by the Nominating Committee	0.719	0.064	0.250

Panel E: Nominee Characteristics by Source

	Search Firm	Others	Difference
Median Age	55	56	(0.004) ^{***}
Fraction of Female Nominees	0.193	0.140	(0.000) ^{***}

Table III - Industry Distribution of Search Firm Usage

This table provides industry breakdown of the sample firms that have used a search firm at least once between 2004 and 2008 to identify a new independent director. The industry categories are based on the Fama-French 48 industries classification. There are 390 different firms that used a search firm at one time between 2004 and 2008. Fama-French 48 industries codes and names are provided in the first and third columns. Number of firms in each Fama-French industry is provided in the second and fourth columns.

Fama-French 48 Industry Code and Name	# Firms	Fama-French 48 Industry Code and Name	# Firms
1 - Agriculture	0	25 - Shipbuilding, Railroad Equipment	0
2 - Food Products	8	26 - Defense	3
3 - Candy & Soda	0	27 - Precious Metals	0
4 - Beer & Liquor	4	28 - Non-Metallic and Industrial Metal Mining	2
5 - Tobacco Products	1	29 - Coal	1
6 - Recreation	3	30 - Petroleum and Natural Gas	5
7 - Entertainment	1	31 - Utilities	20
8 - Printing and Publishing	4	32 - Communication	7
9 - Consumer Goods	12	33 - Personal Services	5
10 - Apparel	7	34 - Business Services	29
11 - Healthcare	4	35 - Computers	12
12 - Medical Equipment	11	36 - Electronic Equipment	31
13 - Pharmaceutical Products	17	37 - Measuring and Control Equipment	12
14 - Chemicals	12	38 - Business Supplies	8
15 - Rubber and Plastic Products	1	39 - Shipping Containers	3
16 - Textiles	1	40 - Transportation	7
17 - Construction Materials	8	41 - Wholesale	11
18 - Construction	9	42 - Retail	28
19 - Steel Works Etc	5	43 - Restaurants, Hotels, Motels	6
20 - Fabricated Products	0	44 - Banking	17
21 - Machinery	20	45 - Insurance	21
22 - Electrical Equipment	5	46 - Real Estate	0
23 - Automobiles and Trucks	8	47 - Trading	12
24 - Aircraft	4	48 - Other	5

Table IV - Summary Statistics

We present summary statistics related to board, governance, CEO compensation, and firm characteristics in this table. SFID stands for search firm-identified independent director. All other variables are defined in the Appendix. Panel A presents summary statistics for board- and governance-related variables. The next two panels, B and C, show summary statistics for CEO compensation and firm characteristics related variables. The first column, N, is the number of firm-year observations with available data. The next three columns provide the mean, the median, and the standard deviation.

	N	Mean	Median	Standard Deviation
Panel A: Board and Governance Characteristics				
SFID dummy	5277	0.276	0.000	0.447
SFID percentage	5277	0.063	0.000	0.122
SFID percentage when SFID dummy = 1	1975	0.223	0.182	0.147
Board size	5277	9.854	10.000	2.427
GIM index	4599	9.325	9.000	2.506
CEO/chairman duality	5277	0.599	1.000	0.496
CEO's stock ownership	5277	0.038	0.009	0.104
Retirement age dummy	5277	0.175	0.000	0.380
CEO's tenure as CEO	5277	7.039	5.000	7.150
CEO from founding family	5277	0.156	0.000	0.363
Independent board dummy	5277	0.982	1.000	0.132
Blockholder other than CEO dummy	5277	0.175	0.000	0.380
Panel B: CEO Compensation				
CEO salary (in thousands)	5153	797	750	416
CEO total compensation (in thousands)	5126	6,041	3,733	7,527
Panel C: Firm Characteristics				
S&P 500 dummy	5277	0.360	0	0.480
Market capitalization (in millions)	5277	10,264	2,279	28,837
ROA	5277	0.096	0.086	0.079
Tobin's Q	5277	1.947	1.563	1.145
Sales growth	5277	0.114	0.099	0.165
R&D expenditures	5277	0.033	0.000	0.069
Capital expenditures	5277	0.064	0.033	0.099
Dividend dummy	5277	0.608	1.000	0.488
Negative excess return dummy (current year)	5277	0.446	0.000	0.497
Negative excess return dummy (pre. year)	5258	0.471	0.000	0.499
Stock return volatility	5204	0.020	0.018	0.008

Table V - Summary Statistics by Search Firm Usage

This table provides summary statistics in Table 3 classified as by the use of a search firm. A firm is classified as type (search firm-identified independent director (SFID) dummy = 1) if it uses a search firm to identify a new independent director at each firm-year observation, and the firm is classified as type (search firm identified independent director (SFID) dummy = 0) if it does not employ the services of a search firm to identify a new independent director. All variables are defined in the appendix. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels when comparing means and medians.

	SFID dummy = 1			SFID dummy= 0		
	N	Mean	Median	N	Mean	Median
Panel A: Governance Characteristics						
Board size	1,458	10.279	10.000	3,819	9.691***	9.000***
GIM index	1,331	9.602	10.000	3,268	9.212***	9.000***
CEO/chairman duality	1,458	0.612	1.000	3,819	0.594	1.000
CEO's stock ownership	1,458	0.018	0.005	3,819	0.046***	0.011***
Retirement age dummy	1,458	0.120	0.000	3,819	0.196***	0.000***
CEO's tenure as CEO	1,458	5.466	4.000	3,819	7.639***	5.000***
CEO from founding family	1,458	0.078	0.000	3,819	0.186***	0.000***
Independent board dummy	1,458	0.991	1.000	3,819	0.979***	1.000***
Independent director blockholder	1,458	0.152	0.000	3,819	0.184***	0.000***
Panel B: CEO Compensation						
CEO salary (in thousands)	1,435	893	882	3718	760***	700***
CEO total compensation (in thousands)	1,430	7,501	5,441	3696	5,475***	3,226***
Panel C: Firm Characteristics						
S&P 500 dummy	1,458	0.552	1.000	3,819	0.287***	0.000***
Market capitalization (in millions)	1,458	12,989	4,489	3,819	9,224***	1,804***
ROA	1,458	0.094	0.087	3,817	0.096	0.085
Tobin's Q	1,458	1.951	1.618	3,819	1.945	1.543**
Sales growth	1,458	0.092	0.083	3,819	0.123***	0.105***
R&D expenditures	1,458	0.038	0.000	3,819	0.031***	0.000***
Capital expenditures	1,458	0.057	0.034	3,819	0.066***	0.033
Dividend dummy	1,458	0.656	1.000	3,819	0.590***	1.000***
Negative excess return dummy (current year)	1,458	0.405	0.000	3,819	0.462***	0.000***
Negative excess return dummy (previous year)	1,457	0.426	0.000	3,801	0.488***	0.000***
Stock return volatility	1,447	0.019	0.017	3,757	0.020***	0.019***

Table VI - CEO Compensation

This table presents the results of CEO compensation regressions. The dependent variable in the first two OLS and the logarithm of CEO salary in year t and the logarithm of total CEO compensation (TDC1) in year t in the last two models. Financial data are as of the previous fiscal year. All variables are described in the Appendix. We control for year and industry firm fixed effects in all models. Industry fixed effects are based on the Fama-French 48 industries classification. P-values are provided in parentheses and are based on heteroskedasticity robust standard errors. Standard errors are clustered at the firm level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels.

Dependent Variables	Log(Salary)	Log(Salary)	Log(TDC1)	Log(TDC1)
SFID Percentage	0.301*** (0.005)	0.262** (0.011)	0.427*** (0.001)	0.426*** (0.001)
GIM Index		0.018*** (0.001)		0.022*** (0.001)
S&P500	0.077* (0.055)	0.046 (0.276)	0.074 (0.169)	0.070 (0.200)
Independent Board Dummy	-0.042 (0.556)	-0.031 (0.648)	-0.057 (0.681)	-0.015 (0.916)
Log(Board Size)	0.188** (0.029)	0.199** (0.011)	0.173 (0.120)	0.142 (0.215)
Log(CEO Tenure)	0.063*** (0.007)	0.046*** (0.009)	0.028 (0.283)	0.026 (0.240)
Retirement Age	-0.009 (0.796)	-0.004 (0.907)	-0.022 (0.655)	-0.030 (0.553)
CEO Is from Founding Family	-0.113 (0.201)	-0.112 (0.141)	-0.238** (0.014)	-0.196** (0.045)
CEO/Chair Duality	0.064* (0.073)	0.076*** (0.008)	0.163*** (0.000)	0.141*** (0.000)
CEO Ownership	-1.169 (0.205)	-0.608 (0.378)	-1.228 (0.126)	-1.594* (0.076)
(CEO Ownership) ²	1.852* (0.096)	1.161 (0.168)	1.645* (0.080)	2.056* (0.070)
Independent Director Blockholder	-0.025	0.049	-0.101*	-0.051

	(0.676)	(0.129)	(0.055)	(0.303)
Log(Market Cap)	0.093***	0.113***	0.412***	0.416***
	(0.006)	(0.000)	(0.000)	(0.000)
ROA	1.312	1.126**	0.547	0.501
	(0.020)	(0.014)	(0.233)	(0.322)
Tobin's Q	-0.192***	-0.158***	-0.164***	-0.154***
	(0.001)	(0.000)	(0.000)	(0.001)
Sales Growth	-0.271*	-0.135*	0.000	-0.005
	(0.058)	(0.088)	(0.998)	(0.963)
R&D	-0.049	0.043	0.480	0.636
	(0.910)	(0.926)	(0.370)	(0.294)
Capex	-0.547***	-0.345***	-0.101	-0.007
	(0.007)	(0.008)	(0.679)	(0.978)
Dividend Dummy	0.035	0.000	-0.068	-0.058
	(0.343)	(0.998)	(0.118)	(0.196)
Negative Excess Return Dummy (cur. year)	-0.007	0.002	-0.113***	-0.104***
	(0.780)	(0.952)	(0.000)	(0.002)
Negative Excess Return Dummy (pre. year)	-0.021	-0.030	-0.113***	-0.110***
	(0.313)	(0.172)	(0.000)	(0.000)
Stock Return Volatility	-2.237	-3.495	5.560*	7.456**
	(0.252)	(0.139)	(0.059)	(0.040)
Constant	5.968***	5.486***	5.180***	4.836***
	(0.000)	(0.000)	(0.000)	(0.000)
Year Fixed Effects	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes
Number of Observations	5,050	4,448	5,050	4,448
R ²	0.169	0.187	0.399	0.405

Table VII - CEO Turnover

This table presents the results of forced CEO turnover regressions. The dependent variable in all models is an indicator variable that is equal to 1 if there is a forced CEO turnover in year t . Financial data are as of the previous fiscal year. All other control variables from Table VI are included but not reported for brevity. All variables are described in the Appendix. We control for year and industry firm fixed effects in all models. Industry fixed effects are based on the Fama-French 48 industries classification. P-values are provided in parentheses and are based on heteroskedasticity robust standard errors. Standard errors are clustered at the firm level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels.

Dependent Variables	Forced Turnover	Forced Turnover	Forced Turnover	Forced Turnover
SFID Percentage	-0.343 (0.351)	-0.171 (0.640)	0.285 (0.599)	0.761 (0.138)
SFID Percentage * Negative Excess Return Dummy (current year)			-1.315* (0.087)	-1.736** (0.032)
SFID Percentage * Negative Excess Return Dummy (previous year)			0.219 (0.763)	0.086 (0.907)
GIM Index		0.019 (0.291)		0.018 (0.307)
All Other Controls	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes
Number of Observations	5,050	4,448	5,050	4,448
R ²	0.169	0.186	0.172	0.191

Table VIII - Mergers and Acquisitions

This table presents the results of mergers and acquisition regressions. The dependent variable in the Probit models in Panel A is a dummy variable equal to 1 if the firm has made an acquisition in year t . The dependent variable in the Panel B is the abnormal return from the day (-2, +2) window. Abnormal returns are based on the market model with an equally weighted market index. Financial data are as of the previous fiscal year. All other control variables from Table VI are included but not reported for brevity. All variables are described in the Appendix. We control for year and industry fixed effects in all models. Industry fixed effects are based on the Fama-French 48 industries classification. P-values are provided in parentheses and are based on heteroskedasticity robust standard errors. Standard errors are clustered at the firm level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels.

Panel A: M&A Probability

Variables	M&A Dummy	M&A Dummy
SFID Percentage	0.522*** (0.007)	0.578*** (0.003)
GIM Index		0.037 (0.001)
All Other Controls	Yes	Yes
Year Fixed Effects	Yes	Yes
Industry Fixed Effects	Yes	Yes
Number of Observations	5,194	4,542
R ²	0.059	0.064

Panel B: Announcement Returns

Variables	Announcement Return	Announcement Return
Constant	-0.028 (0.472)	-0.004 (0.925)
SFID Percentage	-0.026* (0.074)	-0.017 (0.242)
GIM Index		-0.002* (0.072)
Relative Deal Size	-0.016 (0.257)	-0.025* (0.074)
Public Target Dummy	-0.020*** (0.003)	-0.018*** (0.006)
Private Target Dummy	0.001 (0.861)	0.000 (0.924)
Tender Offer Dummy	0.021*** (0.007)	0.022*** (0.007)
All Cash Dummy	0.007* (0.092)	0.004 (0.281)
Deal Competed Dummy	0.004 (0.619)	-0.001 (0.890)
Hostile Deal Dummy	0.003 (0.826)	-0.003 (0.858)
All Other Controls	Yes	Yes
Year Fixed Effects	Yes	Yes
Industry Fixed Effects	Yes	Yes
Number of Observations	1,142	1,018
R ²	0.118	0.132

Table IX - Firm Performance Regression Analysis: ROA

This table presents the results of ROA regressions. The dependent variable in the OLS and second stage of the 2SLS models is ROA in year t . The dependent variable in the first stage of the 2SLS models is the percentage of search firm-identified directors on the board (SFID percentage). Financial data are as of the previous fiscal year. All other control variables from Table VI are included but not reported for brevity. All variables are described in the Appendix. We control for year and industry firm fixed effects in all models. Industry fixed effects are based on the Fama-French 48 industries classification. P-values are provided in parentheses and are based on heteroskedasticity robust standard errors. Standard errors are clustered at the firm level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels.

Panel A: OLS Regressions

Variables	ROA	ROA
SFID Percentage	-0.027** (0.040)	-0.024* (0.070)
GIM Index		0.001* (0.051)
All Other Controls	Yes	Yes
Year Fixed Effects	Yes	Yes
Industry Fixed Effects	Yes	Yes
Number of Observations	5,277	4,599
R ²	0.312	0.327

Panel B: First Stage of 2SLS Regressions

Variables	SFID Percentage	SFID Percentage
Search Firm within 100 kilometers	0.017** (0.013)	0.021*** (0.004)
GIM Index		0.000 (0.857)
All Other Controls	Yes	Yes
Year Fixed Effects	Yes	Yes
Industry Fixed Effects	Yes	Yes
Number of Observations	5,277	4,599
R ²	0.125	0.130

Panel C. Second Stage of 2SLS Regressions

Variables	ROA	ROA
SFID Percentage (instrumented)	-0.407*** (0.001)	-0.335*** (0.003)
GIM Index		0.001* (0.050)
All Other Controls	Yes	Yes
Year Fixed Effects	Yes	Yes
Industry Fixed Effects	Yes	Yes
Number of Observations	5,277	4,599
R ²	0.314	0.328

Appendix Table AI - Variable Definitions

Variable	Definition
Main Independent Variables	
Search firm-identified independent director (SFID) percentage	The percentage of search firm-identified independent directors on the board.
Search firm within 100 kilometers	Dummy variable: 1 if the company has an executive search firm branch within 100 kilometers, 0 otherwise.
Control Variables	
S&P500	Dummy variable: 1 if the firm is in the S&P 500 Index during the year, 0 otherwise.
Independent board	Dummy variable: 1 if the majority of the directors on the board are independent directors, 0 otherwise.
Board size	Number of directors on the firm's board
CEO tenure	The number of years the person has been the CEO of the company.
Retirement age	Dummy variable: 1 if the CEO is over 61 years old, 0 otherwise.
CEO is from founding family	Dummy variable: 1 if the CEO belongs to the founding family, 0 otherwise.
CEO/Chair duality	Dummy variable: 1 if the CEO of the firm is also the chairman of the board, 0 otherwise.
CEO ownership	CEO's percentage stock ownership in his firm, including both stock and stock options that are exercisable within 60 days (as of the proxy date).
Governance index	Gompers, Ishii, Metrick (2003) index.
Independent director blockholder	Dummy variable: 1 if there is a 5% independent director blockholder on the board, 0 otherwise.
Firm size	Log of market value of equity (CSHO *PRCC_F)
Tobin's Q	Market value of assets (calculated as the book value of assets (AT) plus the market value of common stock (CSHO *PRCC_F) less the sum of book value of common equity (CEQ) and balance sheet-deferred taxes (TXDB)) divided by the book value of assets (AT) .
R&D/Sales	Research and development expenses scaled by sales.
Sales growth	Percentage change in sales over the previous fiscal year.
Capex	Capital expenditure scaled by sales.
Dividend dummy	Dummy variable: 1 if the firm pays any dividends during the year, 0 otherwise.
Negative excess return dummy (current year)	Dummy variable: 1 if percentage change in the firm's stock price over the year net of the change in S&P 500 is negative, 0 otherwise.
Negative excess return dummy (previous year)	Dummy variable: 1 if percentage change in the firm's stock price over the previous year net of the change in S&P 500 was negative, 0 otherwise.
Stock return volatility	Standard deviation of daily stock returns during the year.
Dependent Variables	
Salary	Log of salary (SALARY) from Execucomp.
Total compensation	Log of total compensation (TDC1) from Execucomp.
CEO turnover	Dummy variable: 1 a forced CEO turnover is observed during the year, 0 otherwise.
Number of M&As	The number of M&As conducted by the firm during the year.
M&A returns	Abnormal returns from the (-2, +2) window around the M&A announcements using the market model.
ROA	Operating income before depreciation (OIBDP) over book value of assets (AT).