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Searching for Directors

Finance Working Paper N° 1081/2025
July 2025

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Abstract

We examine a Securities and Exchange Commission (SEC) rule mandating disclosure of the source recommending new independent directors (NID). In a sample from 2010 to 2019, 42% of the NID are recommended by search firms, 29% by current independent directors, and 20% by CEO and other executives. The recommending source is systematically associated with certain NID characteristics and subsequent actions. These associations suggest that boards turn to search firms when they need to go beyond their immediate network and identify candidates with greater executive expertise, or to diversify in terms of gender and race. In contrast, CEO-recommended candidates are more common when the CEO is powerful and closer to these candidates, consistent with CEOs using their influence to appoint loyal directors. Along these lines, CEO-recommended NID adopt a more management-friendly stance. Finally, we document widespread non-compliance with the disclosure requirement and recommend that the SEC revamp and enforce the rule.

Keywords: board of directors, director recruiting, director nomination, board diversity, search firms

JEL Classifications: G34, G30, M40

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Searching For Directors

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1. Introduction

The board of directors plays a central role in the U.S. corporate governance system. As such, boards have been the focus of policy reforms and the subject of a large body of research examining board composition, independence, expertise, and diversity, among other aspects.[1] However, surprisingly little is known about *who* first identifies and recommends a candidate to the board (e.g., another independent director, the CEO, a search firm), and whether and how such "origins" are systematically associated with the characteristics of new directors and their subsequent actions.

To fill this gap, we exploit a little-known rule introduced by the Securities and Exchange Commission (SEC) in 2003 to enhance transparency about the director nomination process after the governance scandals of the early 2000s. The rule requires firms to disclose in their proxy filing whether a new independent director (NID) was identified and recommended by current independent directors, the CEO, other executives, a search firm, a shareholder, or other sources.

Using a tailored keyword search, we extract and read the relevant portions of the proxy filing for a sample of 20,746 NID reported in the BoardEx database between 2010 and 2019. The first striking result is that the recommending source is disclosed for only 26.9% of the NID (5,590 out of 20,746), suggesting a high degree of non-compliance.[2] At the firm-level, 59.1% (2,559 out of 4,327) of the firms never disclose the recommending source, but there is significant variation in the compliance even among disclosing firms, with only 24% disclosing the source for all the NID.

Given this evidence, we examine both the firm-level decision to "never disclose" and the director-level decision to "disclose sometimes" (i.e., disclose only for some NID). We find that smaller firms are more likely to never disclose, consistent with smaller, resource-constrained firms

[1] See Linck, Netter and Yang (2008), Adams and Ferreira (2009), Duchin, Matsusaka, and Ozbas (2010), Kim, Mauldin and Patro (2014), Adams (2017), Adams, Akyol and Verwijmeren (2018), Ertimur, Ferri and Oesch (2018), Erel, Stern, Tan and Weisbach (2021), among others. For a review, see Adams, Hermalin and Weisbach (2010).
[2] We attribute the limited compliance to lack of SEC enforcement and low costs of non-compliance (see Section 3.2).

"missing" these disclosure requirements because focused on other requirements in the aftermath of Sarbanes-Oxley. As for the decision to "disclose sometimes", we find some evidence that firms are less likely to disclose when the NID was likely recommended by the CEO, presumably because such candidates may (correctly or incorrectly) be criticized by investors as too loyal to the CEO.

Next, we move to our central research question and examine the frequency of recommending sources and their association with NID characteristics and behavior in the sample of 5,590 NID with disclosures. Search firms are the most frequent source (42.0% of NID), followed by independent directors (28.9%), CEO (14.7%), shareholders (9.8%), other executives (5.2%) and other sources (7.8%). Using these data, we compare the NID recommended by different sources in terms of (i) characteristics at the time of their appointment (e.g., demographic traits, executive and board experience, connectedness) and (ii) subsequent actions and progression on the board (e.g., votes when up for re-election, leaderships positions on board and committees).

While our analysis is largely exploratory, we organize it around the following conceptual framework. Identifying new board members is a board responsibility, usually delegated to a nominating committee made of independent directors. Thus, we view the case of NID recommended by independent directors (hereinafter "ID-recommended NID) as the "default" case. Then, we make predictions as to *why/when* the NID appointed may instead be one proposed by a search firm (hereinafter SF-recommended NID), or by the CEO and other executives (hereinafter CEO-recommended NID) and use the comparisons with the "default" case (the ID-recommended NID) to infer which of those predictions are most supported by the empirical evidence. [3]

[3] NID recommended by shareholders or other sources are mostly appointed via contractual agreement with the shareholder (e.g., hedge fund activist) or as part of a transaction (merger, spin-off). That is, most NID in this category are not truly 'recommended' to the board. Hence, our analysis focuses on ID-, CEO- and SF-recommended NID.

Starting with SF-recommended NID, we consider three (not mutually exclusive) hypotheses.[4] The first – the *certification* hypothesis – is that search firms are hired to identify the same type of directors from the same network as those recommended by independent directors, while providing the client with a third-party certification. The second hypothesis – the *expand pool* hypothesis – is that search firms are employed to expand the pool beyond the immediate network of independent directors while still searching for the same type of 'traditional' candidates, i.e., experienced executives who served on boards. Under the third hypothesis – the *diversify pool* hypothesis – search firms are used to identify "different" directors, whether in terms of gender and race, or in terms of a unique expertise infrequent among the population of independent directors.

Based on our analyses, we find the strongest support for the *expand pool* hypothesis. Relative to ID-recommended NID, SF-recommended NID are much less likely to have a 1st-degree connection to the board (26% vs. 42%), suggesting that search firms draw from a broader talent pool, beyond the immediate network of the independent directors. They are also more likely to have served on boards (i.e., less likely to be rookie directors) and have stronger executive experience. Interestingly, conditional upon having served on board, they have less board experience than ID-recommended NID (less time on boards, lower number of board seats, etc.).

We find partial support for the *diversify pool* hypothesis, in that the frequency of female and (to a lesser extent) non-white directors is higher among SF-recommended NID. However, if this hypothesis was prevalent (beyond gender and race), SF-recommended NID should have a less 'traditional' profile, e.g., they should be more likely to be rookie directors, with limited executive experience. The evidence, as noted earlier, suggests exactly the opposite.

[4] For ease of exposition, we refer to our predictions as 'hypotheses', but we acknowledge these are not hypotheses derived from an analytical framework. Rather, they are conjectures based on insights from prior research.

Finally, we find little support for the *certification* hypothesis. This hypothesis would predict no differences between SF-recommended and ID-recommended NID, whereas our data reveal numerous differences (e.g., in terms of gender, executive and board experience). That said, 26% of SF-recommended NID have a 1st-degree connection to the board, and in 70% of those cases the connection is with the CEO. Thus, there is a non-negligible fraction of cases where search firms pick a candidate close to the board and especially to the CEO, consistent with a certification role.

Overall, we conclude that independent directors tend to recommend candidates within their immediate network and with extensive board experience, whereas they use search firms when they need to go beyond their immediate network and look for traditional candidates with strong executive experience, or occasionally, to diversify the board in terms of gender and race.

Next, we examine two hypotheses regarding CEO-recommended NID. Under the *loyal directors* hypothesis, powerful CEOs propose candidates expected to be favorable to the CEO, and use their influence to get such candidates approved. Under the *access to CEO network* hypothesis, independent directors solicit and/or approve CEO-recommended candidates because CEOs can exploit their personal network to tap into a pool of high-profile candidates with superior traits.

We find little support for the *access to CEO network* hypothesis. While CEO-recommended NID are more likely to be 'distant' from the board (beyond 2 degrees) – suggesting an attempt to reach beyond the independent directors' network – they do not have superior executive experience, and have less board experience and a smaller network, relative to ID-recommended NID. Further, their announcement does not elicit a more positive market reaction.

In contrast, we find greater support for the *loyal directors* hypothesis. First, 84% of CEO-recommended NID with 1st-degree connection to the board has a 1st-degree connection to the CEO, whereas the figure is only 49% for ID-recommended NID. Second, CEO-recommended NID are

more frequent in firms with greater CEO power (e.g., CEO-Chair dual role). Third, after their appointment, CEO-recommended NID are significantly more likely to experience shareholder voting dissent, consistent with a management-friendly stance on governance matters. This finding is important because it suggests that composition by recommending source may affect other board decisions (further highlighting the importance of greater enforcement of the disclosure requirement). Finally, and strikingly, only 24% of CEO-recommended NID are women (vs., respectively, 30% and 38% of ID- and SF-recommended NID), which may reflect CEOs' desire to avoid more effective board monitoring (Adams and Ferreira 2009). These univariate differences hold in multivariate tests controlling for a set of firm characteristics.

We recognize that the selection bias due to limited non-compliance may affect the generalizability of our findings. We perform additional analyses and conclude that: (i) our sample over-states the frequency of SF-recommended NID and understates the frequency of CEO-recommended NID, consistent with firms' incentives to take credit for the use of search firms and avoid scrutiny about CEO involvement in director recruiting; (ii) the documented differences across sources are generalizable to non-disclosing firms, but their true magnitude is likely larger, which makes our findings even more salient. That said, we acknowledge that we cannot fully eliminate concerns with selection bias and thus our evidence should be interpreted accordingly.

The study is subject to three caveats. First, we can only focus on director-level outcomes. Because of the low compliance, we cannot build a firm-level measure of board composition by recommending source and test its association with firm outcomes. Second, we do not observe the entire pool of candidates. Thus, we can only compare the "winners" of the contest and cannot speak to why a certain candidate was chosen over others (an important, but different research question; Erel et al. 2021). This also means that our comparison of the "winners" is likely to

understate the differences between candidates proposed by each source (but not selected). Third, the study is not suited to make causal inferences on the impact of the recommending sources, since the choice of the sources (and more generally, director recruiting) is endogenous. [5] However, our research question is not "causal". Rather, our objective is to describe the outcomes of such endogenous process and infer its objectives, using novel data to shed light on director recruiting.

Our study contributes to various strands of research. First, we add to a limited literature on how directors are appointed to the board. Cai, Nguyen and Walkling (2022) report that over 80% NID have a 1st or 2nd degree professional connection to the board they are joining – implying that referrals between board members are the dominant channel by which NID are identified. By examining the NID recommending source, our study reveals that search firms' and CEOs' recommendations play a significant role and that variation in the recommending source is associated with different director characteristics and outcomes.[6] This evidence may inform future research on the market for directors (Levit and Malenko 2016). Second, we contribute to the research on board independence and CEO influence on boards (Shivadasani and Yermack 1999; Baldenius, Melumad and Meng 2014; Fracassi and Tate 2012; Coles, Daniel and Naveen 2014) by introducing a novel and more direct measure of ties between CEO and directors, i.e., the initial CEO recommendation to the board. Our finding that 20% of NID are CEO-recommended suggests that CEOs continue to influence director nominations even after mandates to have independent nominating committees. Such influence is likely understated, since the above figure is only based on the sample disclosed sources. Third, our evidence of a strong association between

[5] Even if there was an "exogenous" shock (e.g., a new regulation) mandating, say, the use of search firms, the setting would remain subject to an endogeneity problem because the search firm and the general criteria for the director search would be chosen by the board.

[6] To the best of our knowledge, the only study collecting data on the frequency of recommending sources is Akyol and Cohen (2013). However, they do not examine whether the recommending source is associated with differences in director characteristics and director-level outcomes, nor they examine the degree and drivers of non-compliance.

recommending source and gender representation on boards contributes to the literature on board diversity (e.g., Adams and Ferreira 2009; Gul, Srinidhi and Ng 2011; Bernile, Bhagwat and Yonker 2018). Fourth, we add to the research examining firms' non-compliance with SEC disclosure requirements (e.g., Robinson, Xue and Yu 2011; Caskey, Huang and Saavedra, 2023).

Finally, our findings should be of interest to the SEC and investors. Investors have long cared about 'true' directors' independence and expressed concerns about CEO involvement in selecting directors (Bloomberg, 2011).[7] These concerns led to the 2003 SEC disclosure mandate. However, this mandate has not been effectively enforced, resulting in poor compliance. Even if compliance was perfect, under the current regime it would be difficult for investors to reconstruct the board composition by recommending source, since such source is disclosed (in narrative format) only in the first proxy filing after the NID is appointed. Our study may prompt the SEC to revamp the rule by mandating annual tabular disclosure of the recommending source for each director, followed by a targeted review of proxy filings to ensure compliance. This information would allow investors to better monitor and interpret board's actions, and to influence its composition via voting. It would also lead boards to proactively review their composition by recommending source and provide more information about their director selections, especially in the case of CEO-recommended NID.

2. Institutional Setting and Sample Construction

2.1 Disclosure requirements regarding new nominees to the board

The governance scandals of the early 2000s led to a series of reforms aimed to improve directors' accountability. In this context, in 2003 the Securities and Exchange Commission (SEC) issued Release Nos. 33-8340, "Disclosure Regarding Nominating Committee Functions and

[7] In 2011 Hewlett Packard's board was heavily criticized by investors and proxy advisors because its Nominating and Governance Committee allowed the newly appointed CEO Leo Apotheker to sit on an ad hoc committee established to identify potential director candidates. The committed selected four candidates with professional ties to the CEO.

Communications Between Security Holders and Boards of Directors". Among other things, this rule requires that for each new independent director nominated to the board the proxy filing must include "a statement as to which one or more of the following categories of persons or entities recommended that nominee: security holder, non-management director, chief executive officer, other executive officer, third-party search firm, or other, specified source" (Item 407(c)(2)(vii)).[8] Further, firms should "identify also any person or entity that caused a particular candidate to be recommended. For example, if the CEO asks a third party to evaluate a potential candidate, and that third party ultimately recommends the candidate to the nominating committee, both the CEO officer and the third party should be identified as recommending parties in the company's disclosure". More generally, in case of multiple sources the rule calls for disclosure of all sources.

2.2 Sample construction

Our initial sample includes all new independent directors (NID) joining a board of a publicly traded firm covered in BoardEx between 2010 and 2019 and with available financial data in CRSP and Compustat. We start in 2010 because in 2009 the SEC required firms to disclose the experience, qualifications, attributes, or skills that led the nominating committee to choose an individual as a director (Regulation S-K; Adams et al. 2018). This choice allows us to have a homogenous sample period in terms of director-related disclosure requirements.

For the resulting sample of 20,746 NID, we perform a keyword search of the relevant proxy filing to identify whether the recommending source is disclosed. Our search process is described in detail in Appendix 1. When disclosed, we hand code the identity of the recommending source

[8] Initially, the proposed rule required to specifically identify the person recommending the nominee. However, commenters objected that naming the specific source could have a "chilling effect on the search process" or could imply that a nominee was unqualified to serve on the board based solely on the position held by the individual who originally recommended the nominee (SEC 2004). Thus, the final rules only require disclosure of the general category of persons who recommended the nominee, except when a nominee is recommended by the CEO.

using the six categories indicated in the SEC Release 33-8340: search firms, independent directors, CEO, other executives, shareholders, or other sources (see examples in Appendix 2).

Two categories require some explanation. As for the "shareholders" category, virtually all cases under this category refer to special agreements under which a shareholder (e.g., an activist) has the contractual right to nominate a certain number of directors ("activist-appointed" directors; see Kang, Kim, Kim and Low, 2022, and Gow, Shin and Srinivasan, 2023). As for the "other sources" category, it mostly includes NID appointed via some transactions (e.g., merger agreement, spinoffs), with a few cases where the NID was recommended by other parties (industry sources, outside counsel, etc.). In brief, these two categories do not capture "recommendations", but, rather, NID appointments via contractual agreements. Hence, we focus on the other categories.

3. Disclosures of Recommending Sources: Frequency and Determinants

3.1 Frequency of disclosure: descriptive statistics

As a result of the process described above, after reading proxy filings' excerpts for over 10,500 NID, we identify the source for 5,590 of the 20,746 NID, suggesting a compliance rate of only 26.9% at the NID level (Table 1, Panel A). The compliance rate is stable over time (see Figure 1). At the firm level, 59.1% of the sample firms never disclose the recommending source of NID, with the remaining 40.9% of firms disclosing it at least once (hereinafter "disclosing firms"; Table 1, Panel B). Among the disclosing firms (Panel C), only 42% (24%) disclose their recommending sources for at least 2/3 (100%) of their NID during our sample period. If we limit the analysis to the firms with at least 5 NID (to reduce the effect of firms with few NID), the percentage is even lower at 33% (13%), while about 1/3 of the firms disclose the source for less than 1/3 of their NID.

Thus, there is significant cross-sectional variation in compliance even among disclosing firms.[9] Further, Panel D examines disclosure consistency when multiple NID are appointed within the *same* firm-year. Among the 1,566 firm-years with multiple NID *and* disclosed recommending source for at least one of them, the source is disclosed for *all* NID in 73% of the cases. In the other 27% of cases the source is disclosed only for some of the NID nominated in the same year.

To sum up, Table 1 reveals that the high non-compliance rate at the director level is driven not only by never complying firms, but also by firms complying in some years, but not others, and (to a lesser extent) by firms complying only for some of the NID appointed in the same year. This pattern will inform our analysis of the disclosure choice in Section 3.3.

3.2 Is the low compliance rate surprising?

Under Section 408 of the Sarbanes-Oxley Act the SEC reviews companies' filings at least once every three years (scheduled reviews). Thus, any non-compliance should have been detected and cured via SEC comment letters. However, SEC reviews tend to focus on 10-Ks and other transactional filings, rather than proxy filings (Cunningham and Leidner, 2022). Indeed, in our sample period we found only a dozen SEC comment letters which urge non-compliant firms to disclose the NID recommending source (see examples in Appendix 3).

In addition to scheduled reviews, the SEC can perform unscheduled, targeted reviews. For example, after mandating new executive pay disclosures in 2006, the SEC reviewed the proxy filings of 350 firms, identifying widespread non-compliance. As a result, the SEC issued comment letters highlighting defective disclosures, which led to a large, immediate increase in compliance among all firms (Robinson et al. 2011; Gipper 2020). Compensation disclosures continue to be the

[9] In untabulated analysis we check whether such variation is simply driven by firms not complying for a certain period and then always complying afterwards (possibly because they learned about the rule with delay, or they hired a new general counsel, etc.). However, only few firms exhibit this pattern.

focus of most SEC comment letters related to proxy filings, ensuring continued compliance (Geoffroy, Hamm and Schmidt 2023). We are not aware of a similar enforcement initiative regarding the rule examined in this study. Further, we examined the disclosures for a random sample of 500 NID in 2004 (first year under the new rule) and found a compliance rate of 40%. Thus, rather than improving over time (as one would expect if the SEC had enforced compliance), the rate of compliance declined. Finally, and importantly, the cost of non-compliance is negligible, since firms are only asked to correct their deficient disclosures, without any sanctions.

Another valid question is why institutional investors did not urge greater enforcement of this rule (e.g., via shareholder proposals), given their long-standing interest in understanding 'true' directors' independence and limiting CEO's influence on independent directors. Our conversations with practitioners suggest that most institutional investors are not aware of the disclosure requirement and usually only focus on the proxy filings' sections related to executive pay and the items to be voted upon at the annual meeting.

In brief, lack of SEC enforcement initiatives combined with low/no cost of non-compliance and lack of investors' pressure provides a plausible explanation for the low rate of compliance. Along these lines, prior studies find limited compliance with SEC disclosure requirements in other settings where enforcement and penalties for non-compliance are limited (Robinson et al. 2011; Caskey et al. 2023).

3.3 Determinants of non-compliance

The high degree of non-compliance implies that our setting is subject to a potential selection bias problem. Thus, it is important to understand whether there are systematic determinants of non-compliance. To do so, we focus on the two types of non-compliance revealed by Table 1: (i) the

firm-level decision to "never disclose" (Section 3.3.1) and (ii) the director-level decision to "disclose sometimes" (i.e., disclose the source only for some NID; Section 3.3.2.).

In examining these decisions, we conjecture that incentives to withhold disclosure are stronger in the case of CEO-recommended NID, all else being equal. This is because such candidates may (correctly or incorrectly) be perceived by investors as too loyal to the CEO and thus trigger scrutiny and criticism. In contrast, retaining a search firm to perform an independent, structured vetting process of a broader set of candidates should be viewed favorably by investors. Thus, firms should generally be inclined to disclose the source of SF-recommended NID. Finally, since recruiting board members is a responsibility of the nominating committee (which is made of independent directors), there should be little incentive to avoid disclosing the source for ID-recommended NID.

3.3.1 Determinants of "never disclosing" the recommending source

As shown in Table 1, Panel B, about 60% of the sample firms never disclose the NID recommending source (hereinafter Never Disclosers). We consider three potential explanations. The first is that Never Disclosers are smaller firms, with resource-constrained legal teams who "missed" this rule because entirely absorbed by the burdensome requirements imposed by Sarbanes-Oxley.[10] Lack of enforcement initiatives by the SEC and paucity of SEC comment letters (Section 3.2) contributed to the persistence of non-compliance over time. A second explanation is that Never Disclosers are poor governance firms who tend not to comply with SEC requirements when the cost of non-compliance is low (as in the setting we are examining). Under both explanations, non-compliance would not be opportunistic, in the sense that it would not be driven

[10] In contrast to other mandatory disclosure settings, we believe that in our setting the cost of complying with the disclosure requirement is not a factor in the non-compliance decision. Identifying and disclosing the recommending source is virtually costless, regardless of firm size, nor there appear to be significant proprietary costs involved.

by the desire to avoid disclosing NID recommending sources per se. But it would not be random either, since it would be more pronounced among small, poor governance firms.

A third explanation is that the decision to "never disclose" is opportunistic: anticipating that most of their NID will be CEO-recommended, some firms choose to never disclose the recommending source, out of concerns that disclosing it only for some NID may lead investors to push for disclosure for all NIDs. *Ex post*, the evidence in Table 1, suggests these concerns would be exaggerated (many firms were able to disclose the source only for some NID). Also, this scenario makes the strong assumption that firms have good foresight on the use of recommending sources in the future. Nonetheless, we investigate this explanation empirically.

To test the first two explanations, we examine whether Never Disclosers are, respectively, smaller firms (in terms of total assets) and firms with poor governance (as proxied by lower institutional ownership and less board independence). Finally, to test the opportunistic explanation, we examine whether the NID of Never Disclosers are more likely to exhibit six key characteristics associated with CEO-recommended NID (based on the evidence presented later in Table 5, Panel A). Namely, we examine whether they have less executive experience and are more likely to be over 70, less likely to be female, more likely to be rookie directors, more likely to have a 1st -degree connection to the CEO, and less likely to have a 1st-or 2nd-degree connection to the board.[11]

Table 2 presents a multivariate analysis of the likelihood to be a Never Discloser (where Disclosers are defined as firms disclosing the source for at least one NID).[12] It appears that size is the key economic determinant (column 1): a 1 standard deviation increase in total assets decreases

[11] Another variable associated with CEO-recommended ID is the size of the director's network (*Network Size*; see Table 5, Panel A). However, we do not include it in this analysis due to its high correlation with the variable *1st or 2nd Degree Connection to the Board* (r=0.55).

[12] In the Internet Appendix, Table 1, we report a univariate comparison of Never Disclosers to Disclosers, which shows that Never Disclosers are substantially smaller (mean total assets: $6.3 vs. $17.6 billion). Since the difference in size may drive many other differences, we only tabulate the multivariate analysis.

the probability of never disclosing by 9.5% (a 18.9% decrease over the unconditional probability of 50.1%). We also find some evidence that governance plays a role: more independent boards, larger boards and boards with more women are less likely to be Never Disclosers (consistent with studies linking these characteristics to better disclosures and/or greater compliance). However, other governance proxies (dual CEO-Chair role, CEO tenure, institutional ownership) do not load. As for the opportunistic story, four of the six NID variables typically associated with CEO-recommended NID are significant in the predicted direction, but their economic effect is small.

The analysis in column (1) is at the firm-year level, which implicitly treats the "never disclose" decision as the sum of a series of (annual) decisions not to disclose. In column (2) we repeat the analysis at the firm-level, by averaging all independent variables over the sample period into a single firm-level observation (see notes to Table 2). This approach implicitly treats the "never disclose" decision as a single decision based on the expected average values of the relevant variables over the sample period. Firm size remains the most important economic determinant, while only two of the six variables proxying for CEO-recommended NID are significant.[13]

Overall, Table 2 provides strong support for the "small, resource-constrained firms" explanation and some support for the governance explanation. In contrast, the opportunistic explanation (avoiding disclosure for CEO-recommended NID) seems to play a minor role, if any.

3.3.2 Determinants of disclosing the recommending source for some, but not all, NID

As shown in Table 1, even among disclosing firms, compliance is not uniform: most disclosing firms disclose the source for some, but not all, NID (hereinafter Sometimes Disclosers). The Sometimes Disclosers sample allows us to examine whether – within the *same* firm – the source

[13] In Table 2, Panel A and B, "Discloser" includes *all* firm-year observations of firms that disclose the recommending source for at least one NID during the sample period. The results are similar if "Discloser" is redefined to include *only* firm-year observations with disclosure of the NID recommending source.

is less likely to be disclosed for NID who resemble the profile of CEO-recommended NID, based on their observable characteristics. Thus, it is well suited to test the opportunistic explanation.

As a first step, Table 3, Panel A reports univariate differences characteristics between NID with undisclosed and disclosed recommending source, focusing on the six characteristics typically associated with CEO-recommended NID (the same characteristics reported in Table 2). We find that all six characteristics are indeed more frequent in NID with undisclosed recommending source. However, this analysis does not compare NID within the *same* firm.

Next, Panel B presents a multivariate analysis using firm fixed effects (and thus making a within-firm comparison). In column 1 the control variables include the six NID characteristics in Panel A, while (for completeness) column 2 also includes firm and governance characteristics (though most of them exhibit little variation within firm over time). Three of the six director level characteristics are significant in the predicted direction. Firms appear to be more likely to withhold disclosing the source for NID over 70, NID with 1st-degree connection to the CEO and for NID with less executive experience – all characteristics associated with CEO-recommended NID (as per Table 5, Panel A).[14] However, the other three characteristics of CEO-recommended NID (gender, rookie status and distance from the board) are not significant.

Overall, Table 3 provides some support for the opportunistic explanation, i.e., the notion that firms are less likely to disclose the recommending source for NID likely to be CEO-recommended.

4. Recommending Source and Characteristics of New Independent Directors (NID)

After examining the determinants of non-compliance, we move to our central research question and examine the association between the NID recommending source and NID characteristics (Section 4) and performance (Section 5), based on the sample of NID with

[14] For example, a NID over 70 (NID with 1st-degree connection to the CEO) is 9.5% (5.7%) more likely to have the source undisclosed, representing a 16.8% (10.1%) increase over the unconditional probability of 56.7%.

disclosed recommending source. We first present the results *as if* such sample was a random sample from the universe of NID. Then, in Section 6 we discuss whether and how the selection due to limited compliance may affect the interpretation of our findings.

4.1 Frequency of NID recommending source

Table 4 reports the frequency of recommending sources among the 5,590 NID where the source is disclosed. Search firms are the most frequent source (42.0%), followed by independent directors (28.9%), CEO (14.7%), shareholders (9.8%), other executives (5.2%) and other sources (7.8%). The fraction of NID recommended by a search firm has been trending upward (from 35% in 2010 to 45% in 2019) mostly at the expense of independent directors and CEO (see Figure 2). Search firms remain the most frequent source (43.1%) among NID recommended by a single source, which represent 92.5% of the sample (=5,169/5,590).[15,16]

Overall, Table 4 yields two key insights. First, search firms are the most frequent (disclosed) recommending source. In contrast, prior research documents that over 80% NID have a 1st or 2nd degree connection to the board they join and concludes that referrals between board members are the dominant channel by which NID are identified (Cai et al. 2022). One caveat is that our reliance on disclosed data may over-state the true frequency of SF-recommended NID. Larger firms are both more likely to disclose (see Table 2) and more likely to use search firms, because they have more resources to spend on director recruiting ("deep pockets") and greater incentives to use a third-party due to external scrutiny. Indeed, the frequency of SF-recommended NID is higher in

[15] When multiple sources are involved (421 NID), the most frequent combinations (untabulated) are independent directors and CEO (140), independent directors and search firms (65), independent directors and executives (59 cases), and CEO and executives (29). There are only 20 cases of CEO and search firms recommending the same NID. In general, these data suggest search firms are rarely used in conjunction with other sources.

[16] When a search firm is the recommending source, its name is mentioned only in about 21% of the cases (such disclosure is not mandatory), with the five largest search firms (Spencer Stuart, Heidrick Struggles, Russell Reynolds, Korn-Ferry and Egon Zehnder) representing over 81% of such mentions (untabulated analysis). As for the other categories, sometimes firms voluntarily disclose the names of the specific independent director, executive or shareholder recommending the NID (see examples in Appendix 2), but this is not frequent.

'large' firms than in 'small' firms (49.6% vs. 34.4%; see Internet Appendix, Table 2). However, since the size of 'small' firms (median total assets: $0.8 billion) is comparable to the size of Never Disclosers (median total assets: 1.0 billion), the frequency of SF-recommended NID among 'small' firms (34.4%) should be a reasonable proxy for the frequency among Never Disclosers. Thus, while likely overstated in Table 4, the 'true' frequency of SF-recommended NID in the universe of NID should remain substantial, confirming the prominent role of search firms.

The second insight is that CEOs and top executives, combined, are the (disclosed) recommending source for about 20% of the NID. Importantly, the 'true' frequency of CEO-recommended NID is (perhaps substantially) higher than the figure reported in Table 4, given that (i) the frequency is slightly higher, at about 22%, among 'small' firms and, thus, presumably, among Never Disclosers (see Internet Appendix, Table 2); and (ii) Sometimes Disclosers tend to withhold disclosing the source for CEO-recommended NID (see Table 3, Panel B). Reducing CEOs' direct influence on the director nomination process (e.g., Shivdasani and Yermack, 1999) was part of the impetus for the Sarbanes-Oxley Act mandate that only independent directors sit on the nominating committee. While such committee makes the final choice, our analyses suggest that CEOs' influence remains significant, making our investigation even more salient.[17]

4.2 Director-level characteristics by recommending source: descriptive evidence

Table 5, Panel A, compares the characteristics of NID identified by different sources along four dimensions: demographic and education background, executive experience, board experience, and connectedness. The variables are described in Appendix 4. To make the comparisons cleaner, we exclude NID recommended by multiple sources, though the inferences are generally similar

[17] Some ID-recommended NID are recommended by independent directors previously recommended by the CEO and thus influenced by the CEO's preferences over potential candidates. Thus, CEO-recommended NID are only a lower bound of CEO influence.

when using the entire sample of 5,590 NID (untabulated). We group together the categories "CEO" and "other executives" from Table 4, on the ground that these sources share similar incentives and potential conflicts of interest.[18] Thus, in columns 1-3 we present the characteristics of NID by three recommending sources: search firms (hereinafter SF-recommended NID), independent directors (ID-recommended NID), and CEO/executives (CEO-recommended NID). In columns 4-6 we report a significance test for the differences between these three groups.

We first describe such differences (focusing on those that are both statistically and economically significant) and then discuss their combined interpretation in Section 4.3 and 4.4.

Demographic and Education Background

The first, striking piece of evidence is that SF-recommended NID are significantly more likely to be female (38%), relative to ID-recommended NID (30%) and, especially, to CEO-recommended NID (24%). However, if the CEO is female (a small sample), the frequency of women among CEO-recommended NID jumps to 40% (untabulated). Thus, the recommending source plays an important role in terms of gender diversity on boards. Relative to the other two sources, SF-recommended NID are also more likely to be non-white, (9% vs. 7%) and to have an MBA/master degree (44% vs. 33-36%), while they are less likely to be older than 70 (1% vs. 4%).

Executive Experience

SF-recommended NID have higher executive experience in publicly traded firms: 33% (62%) of SF-recommended NID have been CEO (C-suite member), versus 21-22% (35-38%) for the other two sources (variables *CEO Experience* and *C-suite Experience*).

Board Experience

[18] Untabulated analyses indicate that NID recommended by CEOs and NID recommended by executives are similar along all characteristics in Table 5, Panel A.

Counter to the conventional wisdom that search firms bring "new" candidates to boards, SF-recommended NID are less likely to be a *Rookie Director* (31%) (i.e., serve on a board for the first time) relative to ID-recommended NID (45%) and CEO-recommended NID (49%). This suggests that search firms prefer (or their clients request) candidates with proven board experience and/or that boards are more comfortable with a rookie director when proposed by insiders.

Conditioned on having served on boards, ID-recommended NID have the most board experience.[19] For example, 15% of the ID-recommended NID have served as independent chair or lead directors (*Indep Chair*), versus 10% of the CEO-recommended NID and 12% of the SF-recommended NID. Also, the average ID-recommended NID has sat on more committees (*# Committees*). In other words, when proposing a candidate with previous board experience, independent directors tend to focus on candidates with greater experience.

Connectedness

The percentage of NID with a 1st-degree connection to other board members (*1st Degree Connection to Board*) is 26% among SF-recommended NID, 30% among CEO-recommended NID, and a much larger 42% among ID-recommended NID. This is consistent with independent directors preferring candidates with direct referrals from one of their own (Cai et al. 2022).

We also report the percentage of NID with a *1st Degree Connection to CEO* and compute the percentage of NID with a 1st-degree connection to the board who also have a 1st-degree connection to the CEO (variable *% w/1st Degree Connection to CEO*). The difference across sources is remarkable: among CEO-recommended NID with a 1st-degree connection to the board, 84% have a 1st-degree connection to CEO, versus 70% among SF-recommended NID and only 49% among

[19] We measure (i) the number of board seats ever held by the NID (*# Board Seats*), (ii) the cumulative time spent on boards (*# Cumul Yrs on Boards*), (iii) the number of committees the NID has ever sat on (*# Committees*), (iv) the percentage of such committees chaired by the NID (*% Committees as Chair)*, and (v) whether the NID has ever served in a leading role – that is, as independent chairman or lead independent director (*Indep Chair*).

ID-recommended NID. Thus, while CEO and SF are less likely to recommend NID close to the board, when they do so they tend to focus on candidates with a close connection to the CEO.

Interestingly, SF-recommended NID are more likely to have a *2nd Degree Connection to Board* (57% vs. 32-35% for the other two sources). Thus, most SF-recommended NID are neither too 'close' nor too 'far' in the network from the board they are joining. Combining the 1st and 2nd degree figures, it turns out that SF-recommended NID are those more likely to have a *1st or 2nd Degree Connection to Board* at 82%, followed by ID-recommended NID at 75% and CEO-recommended NID at 66%. Thus, candidates "farther away" from the board are more likely to be appointed when the recommendation comes from the CEO, reflecting either CEO's power over the board, or the board's reliance on the CEO to find candidates outside the board network.

Finally, SF-recommended NID have the largest *Network Size* (number of 1st-degree connections to *all* other directors in BoardEx), even after accounting for the fact that SF-recommended NID are less likely to be rookie directors and that rookie directors have lower network size (untabulated test). In contrast, CEO-recommended NID have the smallest network.

4.3 Director-level characteristics: implications for the role of search firms

What does Table 5 tell us about the role of search firms in director recruiting? Why do boards resort to SF-recommended candidates? We find strong support for the *expand pool* hypothesis, i.e., the notion that search firms are hired to help current board members go beyond their immediate network (e.g., 1st-degree connections) while still searching for 'traditional', highly experienced candidates. This is especially evident when comparing SF-recommended NID to ID-recommended NID: SF-recommended NID are less likely to have a 1st-degree connection to the board (26% vs 42%) but are more likely to have served on boards before and have stronger executive experience.

What about the *diversify pool* hypothesis? That is, the notion that search firms are used to identify "different" directors, whether in terms of gender and race, or in terms of unique expertise, experience or any other characteristic that is infrequent among the typical population of independent directors (e.g., cyber expertise, climate expertise)? We find some support for this hypothesis, in that the frequency of female and (to a lesser extent) non-white directors is higher among SF-recommended NID, consistent with anecdotal evidence that search firms are employed to diversify the board in terms of gender and race. However, if this hypothesis was prevalent (beyond gender and race), SF-recommended NID should be more likely to be rookie directors, directors without 1st or 2nd degree connection to the board, and directors with less CEO/C-suite experience, since (on average) directors with unique expertise should be more likely to come from outside the circle of "usual suspects". The evidence, however, suggests exactly the opposite: SF-recommended NID are more likely to have served on boards before and have stronger executive experience. One caveat is that the trend towards recruiting "specialist directors" with unique functional expertise (e.g., cyber, climate, AI) – rather than traditional executive/board experience – is quite recent and may not be captured by our data (Shapira and Nili 2023). Thus, search firms' role in diversifying boards in terms of functional expertise may have increased in recent years.

Finally, we find limited support for the *certification* hypothesis, i.e., the notion that search firms are called in to identify the same type of candidates from the same network as those usually recommended by independent directors, while providing a third-party certification. Under this hypothesis, we would expect little differences between SF-recommended and ID-recommended NID, whereas our data reveal numerous and significant differences on many dimensions. Also, the proportion of SF-recommended NID with a 1st-degree connection to the board is only 26% and is

significantly lower than for ID-recommended NID (42%), suggesting that search firms draw from a broader talent pool, beyond the immediate network of the board's independent directors.

That said, the fact that 26% of SF-recommended NID have a 1st-degree connection to the board, and in 70% of those cases the connection is with the CEO, suggests that there is a non-negligible fraction of cases where search firms appear to perform only a certification role, by intentionally focusing on the immediate network of the board and CEO.[20] This is not surprising given search firms' incentives. Similar to compensation consultants (Murphy and Sandino 2010), search firms care about building a reputation as high-quality independent experts but also care about pleasing their client so as to obtain repeat business (not only for director recruiting but also for executive recruiting). However, our evidence suggests that such certification role is not prevalent.[21]

In interpreting our evidence, it is important to recognize that the characteristics of SF-recommended NID reflect both search firms' preferences and specific mandates of the client hiring them. For example, the prevalence of non-rookie directors with strong executive experience in publicly traded firms among SF-recommended NID may reflect a specific request by the client or the search firm's preference for "safer" candidates to protect their reputation. Also, consider the finding that SF-recommended NID are much more likely to have a 2nd degree connection to the board. This pattern may arise because, among all candidates recommended by search firms, boards prefer those for whom they can gather information via common connections; or, because search

[20] A more extreme version of the *certification* hypothesis – which we may label as rubber stamping hypothesis – is that the 26% represents cases where search firms somehow infer the candidate preferred by the board (or the CEO) and select such candidate. Or, worse, the board and the CEO explicitly communicate their preferred candidate, but do not disclose their role in identifying this candidate (i.e., they violate the disclosure requirements to disclose multiple recommending sources; recall that in Table 5, Panel A, we focus on NID with a unique recommending source).

[21] Further, in untabulated analyses we examine the subset of SF-recommended NID with a 1st -degree connection to the board and continue to find that they differ along the characteristics identified in Table 5, Panel A. That is, even when picking a candidate close to the board or the CEO, search firms emphasize executive experience, board experience, and gender, inconsistent with a simple certification hypothesis.

firms strategically recommend candidates with 2nd-degree connections to the board since they expect the board to be more comfortable with candidates with common connections.

Regardless of the mechanism, our evidence suggests that independent directors tend to recommend candidates within their immediate network and with more experience on boards (conditioned upon having served on boards), whereas they mostly use search firms when they need to go beyond their immediate network and look for proven candidates with strong executive experience, or, less frequently, to diversify the board along dimensions of gender and race.

4.4 Director-level characteristics: implications for the role of CEO recommendations

The evidence in Table 5, Panel A, provides little support for the *access to CEO network* hypothesis, i.e., the idea that boards resort to CEO-recommended candidates because CEOs can tap into a pool of high-profile candidates with superior traits. For example, while CEO-recommended NID are more likely to be distant in the network (beyond 2-degrees of distance) – which may reflect an attempt to reach beyond the independent directors' immediate network – they do not appear to have superior executive experience, and have less board experience and a smaller network, relative to ID-recommended NID. We also do not find that news of their appointment triggers a more positive stock price reaction (see analysis in Section 4.5).

In contrast, we find greater support for the *loyal directors* hypothesis. First, when CEO-recommended NID have a 1st-degree connection to the board, in 84% of the cases they have a 1st-degree connection to the CEO (whereas the figure is only 49% for ID-recommended NID). Second, CEO-recommended NID are more likely to be outside the 1st- or 2nd-degree connection to the board, which may reflect an attempt to pick candidates not linked to other board members (and thus more loyal to the CEO only). Third, CEO-recommended NID do not have higher executive experience (one would expect CEOs to emphasize this trait when looking for strategic partners on

the board) and have *less* experience in leadership positions on the board. One conjecture is that CEOs prefer to avoid NID with strong leadership traits, potentially challenging their authority. Fourth, given the evidence that gender-diverse boards are more effective at monitoring management (Adams and Ferreira 2009), the lower frequency of female NID among CEO-recommended NID may reflect CEOs' desire to avoid 'problematic' directors (though it may also reflect the prevalence of male executives in the typical male CEO's network).

Lacking data on personal ties between CEOs and CEO-recommended NID, we acknowledge that our evidence is indirect. We will go back to the *loyal directors* hypothesis after presenting additional evidence in Section 4.5 and Section 5.

4.5 Firm characteristics by source of recommendation

Table 5, Panel B, reports firm characteristics by recommending source. SF-recommended NID are associated with larger firms ($25.7 billion in total assets, vs. $19.4 and $16.5 billion, respectively, for ID-recommended NID and CEO-recommended NID), better performing firms (in terms of ROA and market-to-book ratio), and firms with greater monitoring (higher institutional ownership, more independent and gender-diverse boards). This is broadly consistent with the notion that larger, better performing firms have more resources to invest in hiring a search firm and that more scrutinized firms have greater incentives to use a third-party in director recruiting.

The other notable result in Panel B is that CEO-recommended NID are associated with firms where CEO power is higher: 53% of firms with CEO-recommended NID have a dual CEO-Chair, versus 40-42% for the other two sources. CEO-recommended NID are also more frequent in firms with longer CEO tenure. This evidence is consistent with the *loyal directors* hypothesis, i.e., powerful CEOs imposing their candidates to the board. We also find that in firms with CEO-recommended NID the ratio of CEO network to the average network of the independent directors

(*CEO/ID Avg Network*) is larger. To the extent that the relative size of the CEO network captures the CEO relative status (relative to the independent directors on the board), this is also in line with a CEO power story. On the other hand, it may also suggest that when the CEO relative network is larger, the independent directors are more likely to rely on the CEO when selecting a new board member, consistent with the *access to CEO network hypothesis*.[22]

Another objective of Panel B is to understand whether the univariate differences in director-level characteristics across recommending sources documented in Panel A are driven by firm characteristics (e.g., size). To examine this possibility, Panel C presents a multivariate analysis, where the dependent variables are seven director-level variables that differ the most across sources based on the evidence in Panel A. The key independent variables are indicators denoting SF- and CEO-recommended NID (ID-recommended NID are the benchmark), with a set of firm-level variables from Panel B included as control variables. We find that the differences between the three sources remain statistically and economically significant, and in some case become larger.[23]

4.6 Market Reaction to the Appointment of New Independent Directors

In this section we examine whether investors' perception of the quality of a NID varies across recommending sources, using an event study around the NID announcement. To have a "clean" event, we focus on the subset of NID announced prior to the proxy filing.[24] This is the case when

[22] Some of the univariate differences in Table 5 Panel B may be driven by differences in firm size. In the Internet Appendix (Table 3, Panel A and B) we split the sample firms based on whether a firm's total assets are above or below median. When we do so, the differences in firm size between SF-recommended NID and the other two sources disappear or become economically marginal. Yet, the differences in governance characteristics generally persist in both samples, suggesting that they are not only driven by differences in firm size.

[23] For brevity, we do not comment on the control variables in Panel C. We note that larger firms (better performing) firms are less (more) likely to end up with a rookie director. One interpretation is that past board experience is considered crucial to sit on the board of larger firms, while better performing firms may be in a better position to integrate a rookie director to the board. Not surprisingly, female NID are less frequent at firms with a higher fraction of women on the board (less need/pressure to diversify the board).

[24] In some cases, the appointment of a NID is first publicly disclosed in the proxy filing sent to shareholders prior to the annual meeting. However, proxy filings contain a large amount of other information and thus are not suitable for an event study (contaminated event problem).

the director is appointed during the year to serve on the board until elected by shareholders at the next annual meeting. Such appointments must be disclosed via an 8-K filing under Item 5.02.

It is important to highlight that the recommending source is ***not*** disclosed in the 8-K filing. Thus, this test cannot speak to investors' perception of the value of a given recommending source. Rather, the test aims to capture investors' assessment of the quality of the NID and her "fit" with the firm, *absent* any knowledge of the recommending source (which, if disclosed, will be disclosed in the subsequent proxy filing). As a result, it may speak to the perceived quality of the NID recommended by different sources (abstracting from investors' views about such sources).

After excluding events contaminated by either a concurrent earnings announcement or a concurrent 8-K filing, we identify 1,799 announcements of NID recommended by search firms, CEOs, or independent directors.[25] The top portion of Table 6, Panel A, reports the cumulative abnormal returns (CAR) during the [-1,1] window around the announcement date. The market reaction is insignificant for ID-recommended and CEO-recommended NID, while it is positive and significant (5% level) at about 0.19% for SF-recommended NID (columns 1-3). Comparing the three sources (columns 4-6), the CAR around announcements of SF-recommended NID is significantly higher than for ID-recommended NID, but only at the 10% level.

[25] To construct the sample, we combine two sources: 8-K filings and BoardEx. For each NID we extract the earliest 8-K Form with Item 5.02 mentioning the NID last name filed during the year prior to the proxy filing date. We identify such filings for 3,825 of the 5,590 NID in our sample and use the 8-K "report date" as announcement date (the "report date" is the date of the event disclosed in the 8-K, such as the press release announcing the NID). Next, from BoardEx we extract the "announcement date" for 2,491 NID of the 5,590 NID. For NID with both 8-K report date and BoardEx announcement date, we use the earliest date (though in almost all cases the dates are identical). For NID without an 8-K filing but with a BoardEx announcement date (315 NID), we use the latter as announcement date. After removing events with a concurrent earnings announcement (i.e., defined as an earnings announcement taking place within 2 days before or after the NID announcement date) or a concurrent 8-K filing (defined as either an Item other than 5.02 in the same 8-K of the NID announcement, or another 8-K filed within 2 days before or after the NID announcement date), this process yields announcement dates for 1,799 NID recommended by a single source (with such source being one of the three sources of interest).

In the bottom portion of Panel A we repeat the analysis for the subset of rookie NID, whose characteristics are more likely to differ across the three sources (non-rookie directors tend to share similar traits, such as significant executive and board experience), making it easier to detect any impact on investors' perceptions. Interestingly, we find a stronger, positive price reaction to the appointment of SF-recommended NID, at 0.51%, and a larger difference relative to ID-recommended NID, who experience a slightly negative reaction.

Panel B reports a multivariate test, where the CAR [-1,1] is regressed on indicators for SF-recommended and CEO-recommended ID, with the ID-recommended NID used as benchmark. In column (1) we control for concurrent announcements of directors' departures, while in column (2) we also control for firm characteristics.[26] Column (3) and (4) replicate column (1) and (2) for the subset of rookie NIDs. In the sample of all NIDs, we find a positive and significant stock price reaction for SF-recommended NID (relative to ID-recommended NID), but the coefficient is no longer significant when we control for firm characteristics. In contrast, the coefficient is larger and significant, even after controlling for firm characteristics, in the subset of Rookie NIDs.

Overall, subject to the usual caveat that the appointment of a single director may not generate a detectable price reaction (thus the power of this test is limited), Table 6 provides some evidence that investors react positively to the characteristics of SF-recommended NID (at least relatively to ID-recommended NID) especially in the case of directors without past board experience, suggesting that search firms identify higher quality candidates among rookie directors. Interestingly, CEO-recommended NID generally do not trigger a positive price reaction, which one would expect if these NID were individuals with special traits that only the CEO could bring to the board (*access to CEO network hypothesis*).

[26] We do not include director-level characteristics because the purpose of the test is to examine the market reaction to different "bundles" of those characteristics, as proxied by each recommending source.

5. Recommending Source and Performance of New Independent Directors

The individual actions of each NID and her contribution to board decisions are not observable. Nor can we examine the effect of recommending sources on firm-level outcomes since the high non-compliance prevents us from measuring board composition by recommending source. Nevertheless, in this section we examine whether the NID "performance" varies depending on the recommending source, focusing on two sets of observable post-appointment director-level metrics: shareholder votes on NID up for re-election and NID progression on the board.

Shareholder votes on directors are a useful metric because they are director-specific and they measure shareholders' perceptions of directors' performance, with stronger voting dissent when directors take pro-management actions opposed by shareholders (Fischer, Gramlich, Miller and White 2009 and Ertimur et al. 2018). Following prior studies (e.g., Cuñat, Gine and Guadalupe, 2012) we proxy for shareholders' voting dissent using (i) the percentage of post-appointment meetings where the NID experience voting dissent above 20%, and (ii) an indicator for whether the NID experiences voting dissent above 20% at least once after her appointment (20% is the threshold typically viewed as capturing substantial shareholders' opposition; Ertimur et al. 2018).

Table 7, Panel A (top portion), reports the percentage of votes cast against the NID when up for re-election at the annual meetings *after* the meeting where the NID is first elected.[27] The findings reveal an interesting pattern: relative to ID-recommended NID, CEO-recommended NID (SF-recommended NID) are significantly more (less) likely to experience voting dissent. For example, 20% of CEO-recommended ND experience voting dissent above 20% at least once, versus 14% of ID-recommended NID, and 8% of SF-recommended NID. These figures may

[27] Proxy advisors generally recommend in favor of new nominees in uncontested elections, on the ground that new directors should not be held accountable for boards' actions prior to their appointment (Ertimur et al. 2018). As a result, NID are elected with almost unanimous support and the votes at the annual meetings ratifying their election are not informative about their performance. Thus, we focus on shareholder votes when NID are up for re-election.

reflect either the fact that CEOs recommend directors with a history of standing up to shareholder pressure and supporting management position, or the fact that CEO-recommended NID become "loyal" to management out of gratitude for the appointment. Similarly, it is possible that search firms propose shareholder-friendly candidates with a history of low voting dissent or that SF-recommended NID – once appointed – try to build a reputation as independent, shareholder-friendly candidates carefully selected by third-party firms. To disentangle these two explanations, Panel A (center portion) reports the same voting data for any other boards the NID sat on *prior* to their appointment to the focal firm (this analysis can only be done for directors with past board experience). Interestingly, there is virtually no difference in voting dissent among CEO-, ID- and SF-recommended NID.[28] While we cannot establish causality, it appears that the documented voting pattern is not the result of selection effects (director "type") but, rather, the result of the recommending source consciously or unconsciously affecting the behavior of NID at focal firms. To the extent that the directors' actions triggering shareholders' voting dissent proxy more generally for directors' behavior, our findings suggest that many boards' decisions may be affected by its composition in terms of recommending source. Because of limited enforcement of the SEC disclosure requirements, however, such composition remains largely unobservable, making it difficult for investors to monitor it and influence it.

Finally, the bottom portion of Panel A presents four variables measuring the progress of NID on the board of the focal firm 3 years after their appointment. We report whether the NID are still on the board (*On Board After 3Yrs*) and, if so, how many committees they sit on (*# Committees After 3 Yrs*), how frequently they hold a committee chair (*Committee Chair After 3 Yrs*), and how frequently they sit as independent chair or lead independent director (*Indep Chair After 3 Yrs*).

[28] Unfortunately, in most cases we cannot determine who recommended these directors at other firms they sat on in the past because of the low rate of compliance reported in Table 1.

Using these data, we examine three specific questions. The first is whether SF-recommended NID exhibit higher turnover either because they differ along dimensions that affect their chemistry with the rest of the board (along the *diversifying pool* hypothesis) or because they are less connected to the current board members (recall that SF-recommended directors are less likely to have 1st-degree connections to the board; see Table 5, Panel A) and thus do not "fit" as well as ID-recommended NID. We find no evidence in support of this conjecture.

A second, related question is whether NID recommended by an "external" party, such as a search firm, are given less opportunity to join committees and take board leadership positions. In support of this idea, SF-recommended NID are less likely to chair a committee after 3 years relative to ID-recommended NID (33% vs. 40%). However, a potential explanation is that ID-recommended NID have greater experience serving as committee chair (Table 5, Panel A).

The third question is whether greater CEO support allows CEO-recommended NID to enjoy greater progression on the board (even though they receive *less* shareholder voting support), consistent with the *loyal directors* hypothesis. Column (6) shows that CEO-recommended NID are indeed more likely to remain on the board and (when staying on the board) to sit on committees and serve in leadership positions, especially relative to SF-recommended NID, but also relative to ID-recommended NID (even though the latter have greater past board experience).

Finally, in Panel B we report a multivariate analysis to ensure that the above differences are not driven by difference in firm characteristics. Our dependent variables include one of the voting dissent variables (*Indicator for Dissent >20%*, measured at the focal firm), and the four variables capturing progression on the board. Our independent variables include indicators for SF-recommended and CEO-recommended NID, firm characteristics and industry and year fixed effects. The results, reported in Table 7, Panel B, indicate that post-appointment voting dissent for

SF-recommended NID continues to be significantly lower than for the other two sources. As for the proxies for progression on board, we continue to find that CEO-recommended NID are more likely to stay on board, relative to SF-recommended NID (see F-test), but the other variables are no longer different, suggesting that the differences in Panel A are driven by firm characteristics.

Overall, the evidence in Table 7 suggests that SF-recommended (CEO-recommended) NID receive more (less) voting support from shareholders when up for re-election, consistent with the recommending source affecting their pro-shareholder (pro-management) stance. As for NID progression on the board after appointment, the evidence of differences across sources is weak.

6. Implications of Non-Compliance for the Generalizability of Our Findings

If the non-compliance documented in Table 1 was random, our findings based on the sample with disclosed recommending sources would be generalizable to the universe of firms and selection bias would not be a concern. However, our analyses in Section 3 suggests that there are systematic determinants of non-compliance. In particular: (i) Never Disclosers are smaller firms and (ii) the frequency of SF-recommended NID and CEO-recommended NID in the disclosed sample is, respectively, over-stated and understated, consistent with firms' disclosure incentives. Thus, it is important to address how these factors affect the interpretation of our findings.

As for firm size, we replicate the analyses in Table 5 and Table 7 for firms with total assets below the sample median, and thus closer in size to Never Disclosers. The results (reported in the Internet Appendix, Table 4) are generally similar to Table 5 and 7, cautiously suggesting that our (conditional upon disclosure) evidence on the association between type of recommending source and the characteristics and performance of NID is generalizable to Never Disclosers.

As for the bias in the frequency of disclosed sources, such bias does not invalidate the comparison of NID characteristics across sources if the disclosure choice is only a function of the

NID recommending source (e.g., "do not disclose the source for CEO-recommended NID", "disclose the source for SF-recommended NID"). It is more plausible, though, that in the case of CEO-recommended NID the disclosure choice may be a function of both the recommending source *and* the type of NID (e.g., "do not disclose the source for CEO-recommended NID if the NID has certain traits"). If so, we conjecture that firms would be comfortable revealing that a NID is CEO-recommended when the NID is of higher-quality and without obvious ties to the CEO, i.e., when the NID is less likely to meet criticism. If so, the characteristics of (disclosed) CEO-recommended NID in Table 5 and 7 are likely biased towards "higher quality" and/or "less suspicious" NID. That is, we only observe the subset of CEO-recommended NID with *more* executive and board experience, with *less* 1st-degree connections to the CEO, etc. However, this type of bias means that the differences between CEO-recommended NID and SF-recommended NID based on the NID with disclosed sources (revealing that CEO-recommended NID have *less* executive and board experience and are *more* likely to have 1st degree connections to the CEO) understate the true differences – which is less concerning for our study than the opposite case.

To sum up, we conclude that our findings based on the disclosed sample likely understate (overstate) the frequency of CEO-recommended (SF-recommended) NID and understate the *magnitude* of the differences between CEO-recommended NID and SF-recommended NID, which makes our study's findings even more salient. Ultimately, though, we cannot fully eliminate concerns associated with selection bias. Thus, our evidence should be interpreted accordingly.

7. Conclusions

Exploiting a 2003 Securities and Exchange Commission (SEC) mandating disclosure of the source recommending new independent directors (NID), we document that 42% of NID are recommended by search firms, 29% by current independent directors, and 20% by CEO and other

executives. Next, we explore whether the "origin" of the NID is systematically associated with their characteristics, their subsequent actions, and their progression on the board. Based on these associations, we conclude that boards turn to search firms when they need to go beyond their immediate network and look for candidates with greater executive expertise, or to diversify the board along dimensions of gender and race. In contrast, CEO-recommended NID are more frequent in firms when the CEO has higher power, and when the ties between the candidate and the CEO are closer, consistent with the CEO using her influence to recommend loyal directors. Further, CEO-recommended NID tend to receive higher shareholder voting dissent during their tenure, suggesting a more management-friendly stance.

An important caveat is that disclosure of the source of recommendation is missing for 74% of NID, suggesting a high degree of non-compliance. We assess the implications of the potential selection bias for our findings (based on the sample with disclosed recommending source) and conclude that: (i) the true frequency of SF-recommended NID (CEO-recommended NID) is lower (higher) than in the sample with disclosed recommending source, consistent with firms' incentives to take credit for the use of search firms and avoid scrutiny about CEO involvement in director recruiting; and (ii) the documented differences between NID from different sources are generalizable to non-disclosing firms, but their true magnitude is likely larger, which makes our findings even more relevant.

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Appendix 1 – Identification of NID Recommending Source

Our initial sample includes all new independent directors (NID) joining the board of a publicly traded firm covered in BoardEx between 2010 and 2019 and with data in CRSP and Compustat.[29] For the resulting sample of 20,746 NID, we proceed as follows:

Step 1: Identify NID recommended by a search firm

We extract all portions of the proxy filing where the last name of the NID and certain keywords appear in the same sentence or in two adjacent sentences. The keywords we use are "search firm(s)", "recruiting firm(s)", as well as the names of the top five search firms: Spencer Stuart, Russell Reynolds, Heidrick Struggles, Korn Ferry, and Egon Zehnder. We read all these sentences to determine whether the NID was recommended by a search firm. When (voluntarily) disclosed, we also collect the name of the search firm. Then, we add to our list of keywords all the names of other 38 search firms identified in this process and repeat the search described above. Overall, this process identifies 2,349 NID recommended by search firms.

Step 2: Identify NID recommended by other sources

Based on the sentences read in Step 1, we identify the verbs typically used to describe how a NID was selected, such as 'recommend/recommended' and 'identify/identified'. Then, we extract the sentence including the last name of the NID and one of these verbs, plus the two adjacent sentences. Finally, we read all these sentences to determine whether the source of recommendation was disclosed. When disclosed, we hand code the identity of such source as: independent directors, CEO, other executives, shareholders, or other sources. Note: for about 1,500 NID the proxy filing states that the nominating and governance (N&G) committee recommended the NID to the board of directors. Because ultimately a nominee is always recommended by the N&G committee to the board (no matter who proposed the nominee), we classify these cases as "source of recommendation not disclosed" (Table 1, Panel A). In contrast, if the language suggests that one (or more) of the N&G committee members identified or recommended the NID, then we consider the recommending source disclosed and classify the source as independent directors.

Step 3: Firm-years where recommending source is disclosed only for some NID

For all firm-years with multiple NID where in Step 1 and Step 2 we identify the source for some but not all NID, for each NID without an identified recommending source we search for the NID name in the entire proxy statement to identify and classify the recommending source (if disclosed).

Note: in the case of NID joining a classified board, the firm is not required to disclose the recommending source until they are up for election (which may happen over the next three years, depending which class of directors they join). Thus, for these NID we examine the subsequent three years' proxy filings as well.

Overall, we read potentially relevant sentences for over 10,500 NID and identify the source for 5,590 NID.[30] The results of this process are summarized in Table 1.

[29] More precisely, we include publicly traded firms listed on NYSE, Nasdaq or the American Stock Exchange with at least $1 million in total assets, $3 million in market value of equity, and end-of-year stock price of $1 or more, and with an "annual report date" in Boardex (fiscal year end) between January 2010 and June 2020. Thus, we have few observations for 2020 (since most firms have a December fiscal year end). We search the NID's last name in the firm's DEF 14A and DEFA 14A proxy filings with a filing date within one year (before or after) of the annual report date in BoardEx (which typically corresponds to the end of the fiscal year), and we retain the earliest proxy filing mentioning the NID. We fail to identify the corresponding proxy filing for about 2.5% of the NID in Boardex. Manual inspection of these cases suggests that the reason is slight differences in the way the last name is reported in the proxy statement versus BoardEx (e.g., "Botín" versus "Botin").

[30] There are many cases of "false positives". For example, the sentence of interest may simply state that no "search firm" was used to "identify" the director.

Validation of search process

One concern is that our search may fail to detect all cases where the recommending source is disclosed, causing us to overstate the rate of non-compliance. We examine a random sample of 300 NID (each from a unique firm) for whom our search (as described above) failed to identify the recommending source. We read all mentions of the NID in the relevant proxy filing and find that the recommending source was disclosed only in 11 cases (3.7%). In these cases, the source was a large or activist shareholder. Our search did not capture these cases because the relevant sentence does not use words such as "identified" or "recommended" but rather states that the NID was appointed as part of an agreement with a shareholder. Thus, our 'false negative' rate appears to be low and limited to the case of NID identified by shareholders. Our "false negative" rate is equally low –at about 5% – in Step 3 of our search process, when we condition on firm-years with one NID recommended by a search firm, and we examine other NID in the same firm-year not captured by Step 2. Since in this sample by construction the source is disclosed for at least one NID, the "false negative" rate of 5% is likely over-estimating the true rate.

A second concern is that firms may disclose the recommending source in the press-release attached to the 8-K filing announcing the appointment of the NID, rather than the proxy filing. We note that the SEC rule is clear in mandating disclosure via the proxy statement, which is the document used by shareholders to cast their votes at the annual meeting (including the vote on directors up for election). Nonetheless, we examine a random sample of 50 8-Ks and find only three cases where the source is disclosed, but they all refer to case where the recommending source was a shareholder, and the appointment was part of a special agreement. We also examine a random sample of 50 10-Ks and find no mention of the source.

A third possibility is that firms may have mis-interpreted the rule as suggesting that the recommending source must only be disclosed for NID first announced in the proxy filing, whereas disclosure would not be required for NID appointed during the year (but voted upon at the annual meeting). While this interpretation would not be correct (and thus failure to disclose the recommending source would still constitute non-compliance), we examine whether the non-compliance rate differs between NID announced prior to the meeting and NID first announced in the proxy filing. The difference is small (74% vs. 70%) and thus cannot explain the widespread non-compliance documented in Table 1.

Finally, an important issue is the discrepancy between our documented compliance rate and that reported in Akyol and Cohen (2013), the only study examining the same regulation. Akyol and Cohen (2013) code the recommending source for 5,219 NID from the S&P 1500 firms in 2004-2008 and do not mention any compliance issue (i.e., each NID in their sample is attributed one or more recommending sources, which would imply a 100% compliance rate). We randomly sampled 500 NIDs from the 2004 S&P 1500 firms and find a compliance rate of only 40%, suggesting that the discrepancy is not due to the different sample and sample period. Rather, it appears that whenever there is no specific info about the source for a given NID (which is what the 2003 SEC rule requires) Akyol and Cohen (2013) identify a recommending source from generic statements about the director recruiting policy. For example, if the firm states that director recruiting falls under the responsibility of the nominating committee, they attribute this recommending source to any NID appointed during the year. However, every firm has these generic statements about director recruiting policy (often stating that the firm use a variety of recommending sources), but we find numerous examples where the disclosed recommending source for a given NID is not the one described in these generic statements. In other words, the SEC rule requires disclosure of the specific recommending source for a specific, named NID. Disclosure of a general recruiting policy does not constitute compliance with the rule.

Appendix 2 – Examples of Source of Recommendation

Recommending Source: Search Firm

"Ms. Carter was newly elected to the Board in fiscal year 2011. She was recommended to the Company by its third-party recruiting firm." *(Air Products & Chemicals Inc, Proxy Statement, December 14, 2011)*

"Ms. Koellner was initially identified to the Board as a potential director by Spencer Stuart, an executive search consulting firm retained by the Board." *(Nucor Corp, Proxy Statement, March 3, 2016)*

Recommending Source: Independent Directors

"Mr. Mark T. Schroepfer…was recommended for nomination by a non-Management member of the Board." *(Winnebago Industries, Proxy Statement, October 25, 2011)*

"Mr. Alvarez was identified as a potential director candidate to the Governance Committee by Mr. Berkowitz." [an independent director]. *(St Joe Co, Proxy Statement, April 5, 2012)*

Recommending Source: CEO or other executives

"Dr. Rothman was first identified as a possible director candidate by the Company's CEO."

(Schering-Plough, Proxy Statement, April 11, 2016)

"The Board appointed Ms. Messemer as a director in January 2019. Ms. Messemer was initially identified as a potential candidate by an executive officer." *(Paypal Holdings Inc, Proxy Statement, April 10, 2019)*

"Ms. Hoskins was initially recommended for consideration by Raymond A. Ritchey, our Senior Executive Vice President, and Mr. Walton was initially recommended for consideration by Mr. Thomas, our Chief Executive Officer." *(Boston Properties Inc, Proxy Statement, April 5, 2019)*

Recommending Source: Shareholders

"In 2013, consistent with the Shareholder Agreement dated June 6, 2013 between the Company and Marubeni…the Nominating and Corporate Governance Committee determined to add two new members to the Board [and]…recommended Messrs. Konto and Toya (each of whom was designated by Marubeni) to be elected to the Board." *(Aircastle Ltd, Proxy Statement, April 8. 2014)*

"Mr. Hamill was recommended to the Nominating and Corporate Governance Committee as a director candidate by a stockholder." *(Arch Resources Inc, Proxy Statement, March 18, 2019)*

Recommending Source: Others

"Prior to the Spin-Off, Myra M. Hart, Peter B. Henry, Terry J. Lundgren, Mackey J. McDonald and John C. Pope served as directors of our Former Parent. In connection with the Spin-Off, they resigned as directors of our Former Parent and joined our Board." *(Kraft Foods Group Inc, Proxy Statement, April 5, 2013)*

"Mssrs. Spoehel and Pirnat were recommended by a financial advisor to the Company."

(Profire Energy Inc, Proxy Statement, January 17, 2014)

Appendix 3 – SEC Comment Letters and Firms' Responses

"Please provide the information required by Item 407(c) (2) (vii) of Regulation S-K with respect to Mr. Weiss." (*SEC Comment Letter to Natus Medical Inc., May 9, 2018*)

"Mr. Weiss was brought to the attention of the Nominating and Governance Committee for its consideration by Mr. Hawkins, our director and President and Chief Executive Officer." (*Natus Medical, Proxy Filing, May 11, 2018*)

"Please state which one or more of the following categories of persons or entities recommended Mr. Ryan as a nominee: Security holder, non-management director, chief executive officer, other executive officer, third-party search firm, or other specified source. See Item 7(d) of Schedule 14A and Item 407(c) (2) (vii) of Regulation S-K (*SEC Comment Letter to Essex Rental Corp., May 5, 2015*)

"Mr. Ryan was recommended to the Committee by industry sources whom the Committee reached out to when previously searching for candidates for Chief Executive Officer of Essex (*Essex Rental Corp. Response Letter to SEC, May 7, 2015*)

"Please provide to us and undertake to include in your future filings, revision of this section to comply with Item 407 as follows:…with regard to the two nominees that are not standing for re-election state which category of person or entity recommended each nominee as required by Item 407(c)(2)(vii)" (*SEC Comment Letter to Popular Inc., September 24, 2010*)

"Messrs. Ballester and Unanue were recommended as nominees for directors by non-management directors." (*Popular Inc. Response Letter to SEC, November 12, 2010*)

"Ensure that you include the disclosure specified in Item 407(c)(2)(vii) of Regulation S-K regarding nominees for director that at the time of their nomination are not standing for re-election and are not executive officers…We note, for example, that it is not apparent what category of persons or entities recommended to the committee that William Kerr in particular be considered as a director candidate" (*SEC Comment Letter to Whirlpool, August 21, 2007*)

"The non-management directors recommended Mr. Kerr to the Corporate Governance and Nominating Committee as a director nominee (*Whirlpool Response to SEC Comment Letter, October 20, 2007*)

"We note that, regarding Lawrence Nussdorf, you have not included the additional disclosure specified in Item 407(c)(2)(vii) of Regulation S-K" (*SEC Comment Letter to CapitalSource Inc., August 21, 2007*)

"The Company acknowledges this comment and will include disclosures responsive to Item 407(c)(2)(vii) in future proxy statements when required." (*CapitalSource Inc. Response to SEC Comment Letter, September 21, 2007*)

Appendix 4 – Variables Definitions

Variable	Definition
Demographics and Education Background *(Source: BoardEx)*	
Age	The age of the new independent director (NID) when joining the board.
Age 70+	Indicator variable equal to 1 if *Age* of the NID is greater than 70, 0 otherwise.
Female	Indicator variable equal to 1 if the NID is female, 0 otherwise.
Non-White	Indicator variable equal to 1 if the NID is non-white, 0 otherwise. The race is identified based on the NID's last name using Python ethnicolr package which classifies the predicted the race into four categories: White, Black, Asian, and Hispanic. We classify categories Black, Asian, and Hispanic as non-white.
MBA/Master	Indicator variable equal to 1 if the NID has an MBA or other Master degree, 0 otherwise.
Executive Experience *(Source: BoardEx)*	
CEO Experience	Indicator variable equal to 1 if the NID has ever served as CEO of a publicly traded firm, 0 otherwise.
C-suite Experience	Indicator variable equal to 1 if the NID has ever served as a C-suite executive of a publicly traded firm, 0 otherwise.
Board Experience* *(Source: BoardEx)*	
Rookie Director	Indicator variable equal to 1 if the NID has never sat on a board as inside (employee) or outside (non-employee) director before, 0 otherwise.
*# Board Seats***	Number of other boards the NID has ever sat on.
*# Cumul Yrs on Boards***	Number of cumulative years spent by the NID as director across all board seats ever held.
*# Committees***	Number of committees the NID has ever served on across all board seats ever held.
*% Committees as Chair***	Percentage of committees where the NID has served as chair, calculated as the number of committee chairs ever held by the NID divided by the number of committees the NID has ever served on.
*Indep Chair***	Indicator variable equal to 1 if the NID has ever served as independent chair or lead independent director before, 0 otherwise.
Connectedness *(Source: BoardEx)*	
1st Degree Connection to Board	Indicator variable equal to 1 if the NID and any existing director of the board they are joining have worked (in either director or executive capacity) at the same company during an overlapping period of time, 0 otherwise.
1st Degree Connection to CEO	Indicator variable equal to 1 if the NID and CEO (or other executives) of the firm they are joining have worked (in either director or executive capacity) at the same company during an overlapping period of time, 0 otherwise. In Table 2, the variable is redefined at the firm-year level as equal to 1 if there is at least one NID in that firm-year with a 1st degree connection to the CEO, 0 otherwise.

% w/1st Degree Connection to CEO	Ratio of *1st Degree Connection to CEO* to *1st Degree Connection to Board*, capturing the fraction of NID with first-degree connection to the board who have a first-degree connection to the CEO.
2nd Degree Connection to Board	Indicator variable equal to 1 if the NID and any existing director of the board they are joining have a first-degree connection to the same third person, 0 otherwise.
1st or 2nd Degree Connection to Board	Indicator variable equal to 1 if NID has the *1st Degree Connection to Board* or *2nd Degree Connection to Board*, 0 otherwise.
Network Size	Number of first-degree connections of the NID to other directors in BoardEx.

Firm Financial Characteristics *(Source: Compustat, CRSP)*

Total Asset	Total assets at the end of the fiscal year.
Book-to-Market	The book value of common equity divided by the market value of common equity at the end of the fiscal year.
ROA	Return on assets, calculated as operating income divided by the total assets at the beginning of the fiscal year.
Abnormal Return	Annual abnormal returns during the prior fiscal year, measured as the difference between raw returns and value-weighted market returns.

Firm Governance and Board Characteristics *(Source: Thomson Reuters, BoardEx)*

Institutional Ownership	Percentage of institutional ownership at the beginning of the fiscal year.
Board Size	Number of directors on the board at the beginning of the fiscal year.
Board Independence (%)	Percentage of independent directors on the board at the beginning of the fiscal year.
Women on Board (%)	Percentage of female directors on the board at the beginning of the fiscal year.
ID Avg Network	The average *Network Size* of existing independent directors at the beginning of the fiscal year.
CEO Network	The *Network Size* of CEO at the beginning of the fiscal year.
CEO/ID Avg Network	Relative network size of the CEO, computed *as CEO Network* divided by *ID Avg Network*.
CEO-Chair	Indicator variable equal to 1 if a CEO is also the Chairman of the board at the beginning of the fiscal year, 0 otherwise.
CEO Tenure	Number of years the incumbent CEO has been in her position as of the beginning of the fiscal year.

Market Reaction Around NID Announcement *(Source: CRSP, BoardEx, Edgar)*

CAR (-1,1)	Cumulative abnormal returns around the NID announcement, calculated as the stock return of the appointing firm over the three trading days centered around the NID *Appointment Announcement Date*, minus the CRSP value-weighted market return over the same period.
SF-recommended	Indicator variable equal to 1 if NID is recommended by a search firm, 0 otherwise.
CEO-recommended	Indicator variable equal to 1 if NID is recommended by the CEO or other executives of the firm, 0 otherwise.

Concurrent Departure	Indicator variable equal to 1 if the firm announces the departure of another director during the (-2,2) window around the *Appointment Announcement Date*, 0 otherwise.

Shareholder Votes at Focal Firm Post-Appointment *(Source: ISS)*

# Annual Meetings with a Vote	Number of shareholder annual meetings at the focal firm where the NID is up for election after joining the board.
% Meetings with Dissent >20%	Percentage of meetings at the focal firm where the NID receives voting dissent greater than 20% after joining the board. Voting dissent is defined as the sum of against and abstention votes scaled by all votes cast (against, for, abstain)
Indicator for Dissent >20%	Indicator variable equal to 1 if the NID ever receives voting dissent greater than 20% when up for election at the focal firm after joining the board, 0 otherwise. Voting dissent is defined as the sum of against and abstention votes scaled by all votes cast (against, for, abstain)

Shareholder Votes at Other Firms Pre-Appointment *(Source: ISS)*

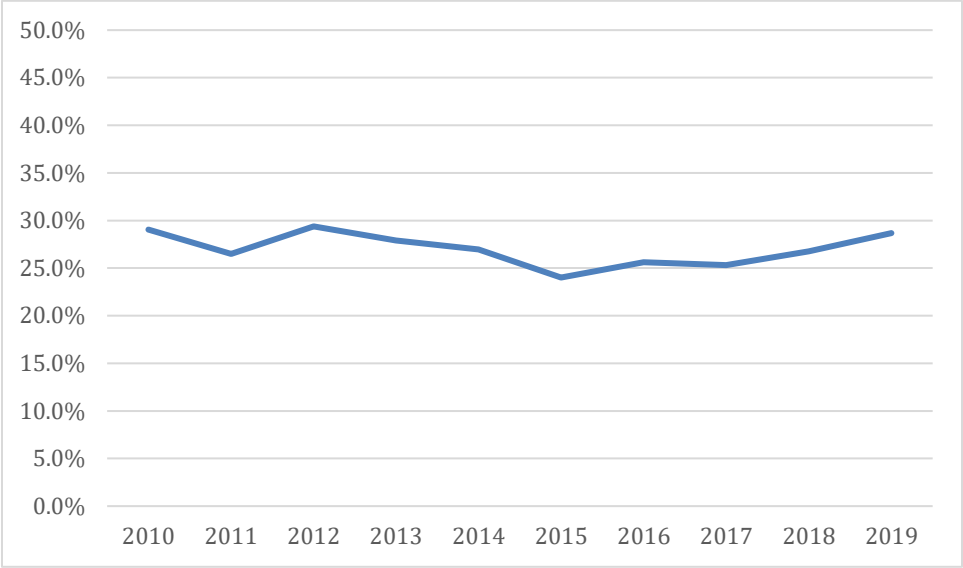
# Annual Meetings with a Vote	Number of shareholder annual meetings at other firms where the NID was up for election before joining the board of the focal firm.
% Meetings with Dissent >20%	Percentage of meetings where the NID received voting dissent greater than 20% when up for election at other firms before joining the board of the focal firm. Voting dissent is defined as the sum of against and abstention votes scaled by all votes cast (against, for, abstain)
Indicator for Dissent >20%	Indicator variable equal to 1 if the NID ever received voting dissent greater than 20% when up for election at other firms before joining the board of the focal firm, 0 otherwise. Voting dissent is defined as the sum of against and abstention votes scaled by all votes cast (against, for, abstain)

Progression on the Board *(Source: BoardEx)*

On Board After 3 Yrs	Indicator variable equal to 1 if the NID sits on the board 3 years after the appointment, 0 otherwise.
Indep Chair After 3 Yrs	Indicator variable equal to 1 if the NID serves as independent chair or lead independent director 3 years after the appointment, 0 otherwise. This variable is constructed only for the subset of NID with *On Board After 3 Yrs* = 1.
# Committees After 3 Yrs	Number of committees the NID serves on 3 years after the appointment. This variable is constructed only for the subset of NID with *On Board After 3 Yrs* = 1.
Committee Chair After 3 Yrs	Indicator variable equal to 1 if the NID serves as a committee chair 3 years after the appointment, 0 otherwise. This variable is constructed only for the subset of NID with *On Board After 3 Yrs* = 1.

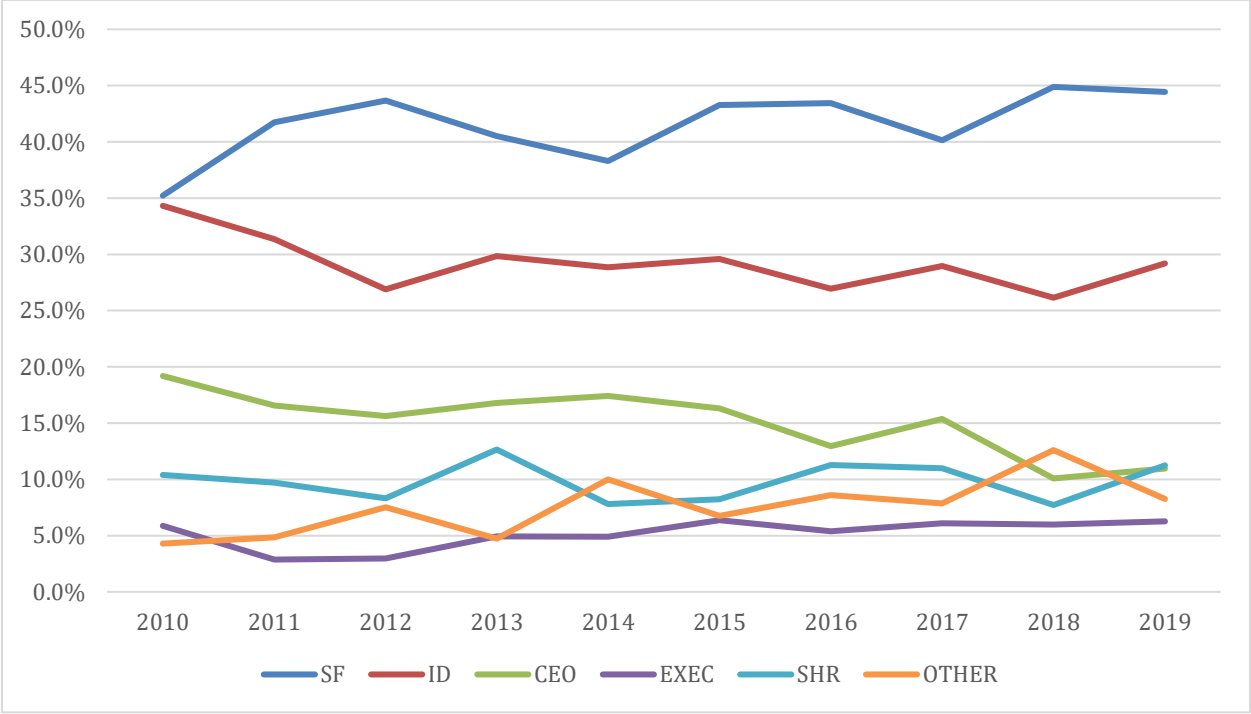
* All the Board Experience variables refer to the experience on boards of publicly traded companies.
** These variables are only defined for NID who are not classified as *Rookie Director*.

Figure 1 Frequency of NID with Disclosed Source of Recommendations (2010-2019)



Notes: The dark blue line shows the percentage of NID with disclosed recommending source between 2010 and 2019 based on the search described in Appendix 1.

Figure 2 Frequency of (Disclosed) Recommending Sources (2010-2019)



Notes: The dark blue line shows the percentage of NID recommended by search firms (SF). The red line shows the percentage of NID recommended by independent directors (ID). The green line shows the percentage of NID recommended by CEO (CEO). The purple line shows the percentage of NID recommended by other executives (EXEC). The light blue line shows the percentage of NID recommended by shareholders (SHR). The orange line shows the percentage of NID recommended by other sources (OTHER).

Table 1 Disclosure of Recommending Source of New Independent Directors (NID)

Panel A. Frequency of Disclosure at the Director Level

Description	*Number*	*% Total*
New Independent Directors (NID) in BoardEx [2010-2019]	20,746	
Source of recommendation not disclosed	15,156	73.1%
Source of recommendation disclosed	5,590	26.9%

Panel B. Frequency of Disclosure at the Firm Level

Description	*# Firms (%)*	*# NID*
Unique firms with NID in BoardEx [2010-2019]	4,327	20,746
Firms never disclosing recommending source of NID	2,559 (59.1%)	10,176
Firms disclosing recommending source for at least 1 NID	1,768 (40.9%)	10,570
NID with disclosure		5,590 (52.9%)
NID without disclosure		4,980 (47.1%)

Panel C. Disclosure Consistency Over Time Among Disclosing Firms

Recommending source disclosed…	*All Disclosing Firms*		*Disclosing Firms with at least 5 NID*	
	# Firms	*%*	*# Firms*	*%*
…for <1/3 NID	428	24%	354	33%
…for >=1/3 and <2/3 NID	592	34%	371	34%
…for =>2/3 NID and <100% NID	318	18%	222	20%
…for 100% NID	430	24%	140	13%
Total	**1,768**	**100%**	**1,087**	**100%**

Panel D. Disclosure Consistency across NID Among Disclosing Firms

# Firm-years with multiple NID and disclosure for at least one NID	1,566	
#Firm-years with disclosure for all NID		1,146 (73%)
#Firm-years with disclosure for some NID		420 (27%)

Notes: This table reports descriptive statistics on firm-level patterns in the disclosure of the source of recommendations of new independent directors (NID). Panel A and Panel B report the frequency of disclosure of the NID recommending source, respectively, at the director level and at the firm level. Panel C examines the subset of firms disclosing the NID recommending source at least once during the sample period ("disclosing firms") and reports in column 1 and 2 the number and percentage of disclosing firms which disclosed the recommending source for a certain percentage of their NID, indicated in each row. For example, the first row reports the number and percentage of disclosing firms which disclosed the recommending source for less than 1/3 of their NID. Columns 3 and 4 report the same figures for the subset of disclosing firms with at least 5 NID during the sample period. Panel D examines the subset of firm-years with multiple NID and disclosure of the recommending source for at least one of the NID and reports the percentage of such firm-year observations with disclosure of the recommending source for all vs. some NID.

Table 2 Determinants of Decision to "Never Disclose" the NID Recommending Source

	Firm-year-level		*Firm-level*	
	(1)		***(2)***	
	Never Discloser	***Marginal Effect***	***Never Discloser***	***Marginal Effect***
Firm Characteristics				
log(TA)	-0.047***	-9.5%	-0.041***	-8.1%
	(-6.92)		(-6.24)	
Book-to-Market	-0.023		-0.021	
	(-1.24)		(-1.07)	
ROA	-0.071**	-1.8%	-0.066**	-2.0%
	(-2.28)		(-2.27)	
Abnormal Return	0.017*	0.7%	0.029	
	(1.65)		(1.30)	
Governance and Board Characteristics				
Institutional Ownership	-0.001		0.034	
	(-0.03)		(0.94)	
Board Size	-0.010**	-2.4%	-0.015***	-3.3%
	(-2.32)		(-2.97)	
Board Independence (%)	-0.344***	-2.8%	-0.509***	-4.1%
	(-3.41)		(-4.68)	
Women on Board (%)	-0.405***	-4.5%	-0.427***	-4.3%
	(-5.27)		(-4.99)	
CEO/ID Avg Network	-0.004		0.005	
	(-0.39)		(0.53)	
CEO-Chair	-0.008		-0.010	
	(-0.46)		(-0.52)	
CEO Tenure	-0.001		-0.007***	-2.6%
	(-0.60)		(-2.87)	
NID Average Characteristics				
Age 70+	0.072**	1.3%	0.106*	1.4%
	(2.57)		(1.90)	
Female	-0.027**	-1.1%	0.006	
	(-2.47)		(0.20)	
C-suite Experience	-0.004		-0.007	
	(-0.32)		(-0.26)	
Rookie Director	0.029**	1.3%	0.075***	2.5%
	(2.38)		(2.70)	
1st Degree Connection to CEO	0.005		0.006	
	(0.29)		(0.20)	
1st or 2nd Degree Conn. to Board	-0.031**	-1.4%	-0.035	
	(-2.17)		(-1.20)	
Constant	1.288***		1.436***	
	(15.34)		(15.32)	
Industry FE	Yes		Yes	
Year FE	Yes		N/A	
Observations	10,523		3,739	
Adj. R-Square	0.138		0.122	

Notes: This table reports a multivariate analysis (linear probability model) of the determinants of decisions to "never disclose" the NID recommending source. The dependent variable is equal to one if Never Discloser is equal to one, and 0 otherwise. The independent variables include the firm-level and NID-level characteristics, as well as industry and year fixed effects. In column (1) the unit of analysis is at the firm-year level. Thus, in the case of firms with multiple NID in the same firm-year, the firm-year NID characteristics are computed as the mean value across all the NID in that firm-year. In column 2, the unit of analysis is at the firm level. That is, all independent variables are computed as mean values across all firm-years (in the case firm-level variables) and across all NID (in the case of NID-level variables). For continuous independent variables with a statistically significant coefficient, the Marginal Effect column reports the increase in the probability of being a Never Discloser for a 1 standard deviation increase in the independent variable. For indicator variables with a statistically significant coefficient, the Marginal Effect column reports the increase in the probability of being a Never Discloser when the indicator variable goes from 0 to 1. See Appendix 4 for variable definitions. *, **, *** represent significance levels of 0.1, 0.05, 0.01, respectively. Standard errors are clustered by firm.

Table 3 Determinants of Decision to Disclose the Recommending Source for Some NID Only

Panel A. Univariate Analysis

	Mean		*Diff. in Means*
	(1) NID source undisclosed (n=3,601)	*(2) NID source disclosed (n=2,749)*	*(3) = (1) - (2)*
NID Characteristics			
Age 70+	0.04	0.02	0.02***
Female	0.29	0.32	-0.03***
C-suite Experience	0.42	0.48	-0.06***
Rookie Director	0.42	0.38	0.03***
1st Degree Connection to CEO	0.22	0.19	0.03***
1st or 2nd Degree Conn. to Board	0.74	0.76	-0.02**

Panel B. Multivariate Analysis

	(1) NID source undisclosed	*Marginal Effect*	*(2) NID source undisclosed*	*Marginal Effect*
NID Average Characteristics				
Age 70+	0.095***	9.5%	0.090***	9.0%
	(2.89)	*(from 0 to 1)*	(2.72)	*(from 0 to 1)*
Female	-0.013		-0.010	
	(-0.92)		(-0.67)	
C-suite Experience	-0.031**	-3.1%	-0.030*	-3.0%
	(-2.02)	*(from 0 to 1)*	(-1.94)	*(from 0 to 1)*
Rookie Director	0.018		0.016	
	(1.11)		(0.98)	
1st Degree Connection to CEO	0.057**	5.7%	0.059**	5.9%
	(2.15)	*(from 0 to 1)*	(2.21)	*(from 0 to 1)*
1st or 2nd Degree Conn. to Board	0.003		0.004	
	(0.18)		(0.22)	
Firm & Governance Controls	No		Yes	
Firm FE	Yes		Yes	
Year FE	Yes		Yes	
Observations	6,350		6,350	
Adj. R-Square	0.116		0.121	

Notes: This table reports the analyses for determinants of decision to disclose the recommending source for some NID only, using the sample including only firms disclosing the recommending source for at least one NID but not for all the NID. Panel A reports the mean of NID characteristics for NID with source undisclosed (column 1) and NID with source disclosed (column 2), as well as a univariate test for the difference in means (column 3). *, **, *** represent significance levels of 0.1, 0.05, 0.01, respectively, for two-tailed tests of differences. Panel B presents a multivariate analysis (linear probability model) at the director level where the dependent variable is equal to one for NID with undisclosed recommending source, 0 otherwise. In column 1 the control variables include the director-level characteristics in Panel A, as well as year and firm fixed effects. In column 2 they also include the firm and governance characteristics used in Table 2, Panel B (coefficient suppressed for ease of exposition). The Marginal Effect column reports the increase in the likelihood of not disclosing the source when the indicator variable goes from 0 to 1. See Appendix 4 for variable definitions. *, **, *** represent significance levels of 0.1, 0.05, 0.01, respectively. Standard errors are clustered by firm.

Table 4 Frequency of (Disclosed) NID Recommending Sources

Description	**All NID** *(N=5,590)*		**NID w/ single source** *(N=5,169)*	
	#	*%*	*#*	*%*
Search Firm	2,349	42.0%	2,226	43.1%
Independent director(s)	1,617	28.9%	1,291	25.0%
CEO	823	14.7%	604	11.7%
Other executive(s)	291	5.2%	156	3.0%
Shareholders	546	9.8%	482	9.3%
Others	434	7.8%	410	7.9%

Notes: This table reports the frequency of recommending sources of new independent directors (NID), for the subset of NID where the recommending source is disclosed. In the first two columns the NID recommended by multiple sources are counted within each of the recommending sources. Thus, the sum of the first (second) column is higher than 5,590 (100%), i.e., the total number of NID with disclosed recommending source. The third and fourth columns only report data for the subset of NID recommended by a single source.

Table 5 Recommending Source and Characteristics of New Independent Directors (NID)
Panel A. Recommending Source and Characteristics of NID

	Mean			*Diff. in Means*		
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
Source of recommendation	*ID*	*SF*	*CEO*	*(2)-(1)*	*(3)-(1)*	*(2)-(3)*
Variables	*(n=1291)*	*(n=2226)*	*(n=789)*	*SF vs. ID*	*CEO vs. ID*	*SF vs. CEO*
Demographics and Education Background						
Age	57.81	56.85	57.61	-0.96***	-0.20	-0.76**
Age 70+	0.04	0.01	0.04	-0.03***	-0.00	-0.03***
Female	0.30	0.38	0.24	0.08***	-0.07***	0.14***
Non-White	0.07	0.09	0.07	0.02**	0.00	0.02**
MBA/Master	0.36	0.44	0.33	0.08***	-0.03	0.11***
Executive Experience						
CEO Experience	0.21	0.33	0.22	0.12***	0.02	0.10***
C-suite Experience	0.38	0.62	0.35	0.24***	-0.03	0.27***
Board Experience						
Rookie Director	0.45	0.31	0.49	-0.15***	0.03	-0.18***
# Board Seats	2.83	2.58	2.68	-0.25**	-0.16	-0.10
# Cumul Yrs on Boards	11.46	9.27	10.70	-2.18***	-0.76	-1.42**
# Committees	5.01	4.31	4.25	-0.70***	-0.76***	0.06
% Committees as Chair	0.18	0.13	0.16	-0.05***	-0.03*	-0.02**
Indep Chair	0.15	0.12	0.10	-0.03**	-0.05**	0.01
Connectedness						
1st Degree Connection to Board	0.42	0.26	0.30	-0.17***	-0.12***	-0.05**
1st Degree Connection to CEO	0.21	0.18	0.25	-0.03**	0.05**	-0.08***
% w/1st Degree Connection to CEO	0.49	0.70	0.84	0.21***	0.35***	-0.14***
2nd Degree Connection to Board	0.32	0.57	0.35	0.24***	0.03	0.21***
1st or 2nd Degree Connection to Board	0.75	0.82	0.66	0.08***	-0.09***	0.16***
Network Size	244.89	329.92	211.03	85.03***	-33.86***	118.90***

Panel B. Recommending Source and Firm Characteristics

	Mean			*Diff. in Means*		
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
Source of recommendation	*ID*	*SF*	*CEO*	*(2)-(1)*	*(3)-(1)*	*(2)-(3)*
Variables	*(n=1291)*	*(n=2226)*	*(n=789)*	*SF vs. ID*	*CEO vs. ID*	*SF vs. CEO*
Firm Characteristics						
Total Asset	19,440.24	25,709.53	16,526.42	6,269.29***	-2,913.83	9,183.12***
Book-to-Market	0.54	0.46	0.51	-0.08***	-0.03	-0.05***
ROA	0.01	0.06	0.02	0.05***	0.00	0.04***
Abnormal Return	0.03	0.05	0.04	0.03*	0.01	0.01
Governance and Board Characteristics						
Institutional Ownership	0.70	0.80	0.68	0.10***	-0.03**	0.12***
Board Size	9.37	9.67	8.93	0.29***	-0.44***	0.73***
Board Independence (%)	0.85	0.87	0.83	0.02***	-0.02***	0.04***
Women on Board (%)	0.14	0.17	0.13	0.04***	-0.01	0.04***
ID Avg Network	285.95	370.65	259.31	84.70***	-26.64***	111.34***
CEO Network	200.94	254.33	209.52	53.39***	8.58	44.81***
CEO/ID Avg Network	0.76	0.70	0.82	-0.05**	0.07*	-0.12***
CEO-Chair	0.40	0.42	0.53	0.02	0.13***	-0.11***
CEO Tenure	4.66	4.44	5.48	-0.23	0.82***	-1.05***

Panel C. Multivariate Analysis of NID Characteristics

	Dependent Variables						
Variable	*(1) Female*	*(2) C-suite Experience*	*(3) Rookie Director*	*(4) 1st Degree Connection to Board*	*(5) % w/1st Degree Connection to CEO*	*(6) 2nd Degree Connection to Board*	*(7) Network Size*
Source of Recommendation							
SF-recommended	0.064***	0.180***	-0.070***	-0.195***	0.208***	0.208***	36.032***
	(3.40)	(8.97)	(-3.59)	(-10.61)	(6.57)	(10.68)	(3.05)
CEO-recommended	-0.065***	-0.032	0.047*	-0.122***	0.326***	0.050**	-26.980*
	(-2.89)	(-1.30)	(1.85)	(-5.23)	(8.40)	(2.08)	(-1.93)
Firm Characteristics							
log(Total Asset)	0.002	0.022***	-0.044***	0.002	-0.038***	0.028***	42.309***
	(0.27)	(3.34)	(-6.85)	(0.31)	(-3.26)	(4.33)	(10.33)
Book-to-Market	0.006	-0.029	0.028	-0.026	-0.031	-0.023	-56.594***
	(0.27)	(-1.23)	(1.23)	(-1.21)	(-0.79)	(-0.99)	(-4.30)
ROA	0.079*	-0.008	0.098*	0.026	0.318***	-0.158***	-66.576***
	(1.84)	(-0.16)	(1.90)	(0.55)	(4.05)	(-3.07)	(-2.67)
Abnormal Return	0.033*	-0.016	0.026	0.005	0.015	0.035	-6.664
	(1.76)	(-0.74)	(1.22)	(0.27)	(0.41)	(1.63)	(-0.56)
Governance and Board Characteristics							
Institutional Ownership	0.039	0.112***	-0.145***	-0.065	-0.040	0.188***	-29.279
	(0.93)	(2.59)	(-3.43)	(-1.59)	(-0.59)	(4.42)	(-1.16)
Board Size	0.013**	-0.008	0.004	-0.009*	-0.005	0.011**	-2.333
	(2.44)	(-1.59)	(0.77)	(-1.89)	(-0.54)	(2.16)	(-0.72)
Board Independence (%)	0.125	0.192	0.043	0.151	-0.020	0.113	93.077
	(0.94)	(1.43)	(0.31)	(1.19)	(-0.09)	(0.83)	(1.12)
Women on Board (%)	-0.791***	0.401***	-0.201**	0.033	0.130	0.106	122.403**
	(-9.44)	(4.54)	(-2.35)	(0.44)	(0.91)	(1.27)	(2.56)
CEO/ID Avg Network	-0.024**	-0.000	0.014	0.019*	0.030	-0.039***	4.448
	(-2.00)	(-0.03)	(1.07)	(1.66)	(1.47)	(-3.22)	(0.59)
CEO-Chair	0.033*	0.001	0.014	0.009	0.011	-0.019	-7.515

	(1.86)	(0.06)	(0.77)	(0.50)	(0.36)	(-1.06)	(-0.71)
CEO Tenure	0.002	-0.005***	0.007***	-0.003	0.001	-0.000	-0.493
	(1.00)	(-2.60)	(3.39)	(-1.47)	(0.40)	(-0.20)	(-0.37)
Constant	0.158	0.039	0.770***	0.417***	0.837***	-0.187*	-97.663
	(1.47)	(0.36)	(6.97)	(4.04)	(4.78)	(-1.72)	(-1.49)
F-Test (SF = CEO)	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3,492	3,492	3,492	3,492	1,053	3,492	3,492
Adj. R-Square	0.106	0.096	0.080	0.148	0.285	0.133	0.134

Notes: This table reports the analyses on the recommending source and characteristics of NID. Panel A (Panel B) reports director-level (firm-level) characteristics across various source of recommendation. Column (1) to (3) reports the mean of such characteristics when the source of recommendation is independent director(s) (ID), search firm (SF), or CEO and executives (CEO), respectively. Column (4) reports the difference in mean characteristics between NID recommended, respectively, by SF and ID. Column (5) reports the difference in mean characteristics between NID recommended, respectively, by CEO and ID. Column (6) reports the difference in mean characteristics between NID recommended, respectively, by SF and CEO. Note that the N reported in the top row refers to the variable with the highest number of observations. Panel C presents a multivariate analysis, with each column using one of the director-level characteristics from Panel A as the dependent variable. The independent variables include indicators for SF-recommended and CEO-recommended NID, the firm characteristics in Panel B, as well as industry and year fixed effects. The F-Test row reports the p-value for a significance test of the difference between the coefficients of SF-recommended and CEO-recommended. *, **, *** represent significance levels of 0.1, 0.05, 0.01, respectively, for two-tailed tests of differences from zero. Standard errors are clustered by firm. See Appendix 4 for variable definitions.

Table 6 Recommending Source and Market Reaction to NID Appointment

Panel A. Univariate Test

	Mean			*Diff. in Means*		
Source of recommendations	*(1) ID*	*(2) SF*	*(3) CEO*	*(4) (2)-(1) SF vs. ID*	*(5) (3)-(1) CEO vs.ID*	*(6) (2)-(3) SF vs. CEO*
All NIDs						
CAR (-1,1)	-0.13	0.19**	0.06	0.32*	0.19	0.13
Observations	510	994	295	1504	805	1289
Rookie NIDs Only						
CAR (-1,1)	-0.38*	0.51***	0.14	0.89***	0.52*	0.37
Observations	235	299	136	534	371	435

Panel B. Multivariate Test

	Dependent Variable: CAR[-1,1]			
Sample:	**All NIDs**		**Rookie NIDs Only**	
Variable	(1)	(2)	(3)	(4)
SF-recommended	0.354**	0.253	0.743**	0.699**
	(2.01)	(1.44)	(2.56)	(2.42)
CEO-recommended	0.218	0.179	0.324	0.34
	(0.95)	(0.81)	(1.05)	(1.12)
Concurrent Departure	0.213	0.205	0.231	0.235
	(0.95)	(0.91)	(0.57)	(0.58)
Log(Total Assets)		0.07		0.155**
		(1.48)		(2.09)
Book-to-Market		-0.571**		-0.166
		(-2.32)		(-0.42)
Abnormal Return		-0.058		-0.055
		(-0.26)		(-0.16)
Constant	-0.174	-0.449	-0.3	-1.439**
	(-1.23)	(-0.95)	(-1.41)	(-2.01)
F-Test (SF = CEO)	0.5134	0.7072	0.1561	0.2184
Industry FE, Year FE	Yes	Yes	Yes	Yes
Observations	1,798	1,754	667	653
Adj. R-Square	0.001	0.01	0.007	0.015

Notes: This table presents an event study around the announcements of NID appointed prior to the proxy filing date. Panel A reports mean cumulative abnormal returns (CAR) around the NID announcement date by recommending source (column 1-3), as well as differences in mean CARs (column 4-6). Panel B presents a multivariate test where the dependent variable is CAR [-1,1] and the independent variables include indicators for SF-recommended NID, CEO-recommended NID and concurrent announcement of the departure of another director (Column 1 and Column 3). Column (2) and Column (4) add selected firm characteristics. The F-Test row reports the p-value for a significance test of the difference between the coefficients of SF-recommended and CEO-recommended. See Appendix 4 for variable definitions. *, **, *** represent significance levels of 0.1, 0.05, 0.01, respectively. Standard errors are clustered by NID appointment (following Cai et al. 2022).

Table 7 Recommending Source and Performance of New Independent Directors (NID)
Panel A. Univariate Analysis

	Mean			*Diff. in Means*		
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
Source of recommendation	*ID*	*SF*	*CEO*	*(2)-(1)*	*(3)-(1)*	*(2)-(3)*
Variables	*(n=1291)*	*(n=2226)*	*(n=789)*	*SF vs. ID*	*CEO vs. ID*	*SF vs. CEO*
Shareholder Votes at Focal Firm Post-Appointment:						
# Annual Meetings with a Vote	4.68	4.85	4.87	0.18*	0.19	-0.02
% Meetings with Dissent >20%	0.05	0.03	0.08	-0.02***	0.03***	-0.05***
Indicator for Dissent >20%	0.14	0.08	0.20	-0.05***	0.06***	-0.11***
Shareholder Votes at Other Firms Pre-Appointment:						
# Annual Meetings with a Vote	6.53	6.29	5.51	-0.24	-1.02**	0.78**
% Meetings with Dissent >20%	0.03	0.03	0.04	0.00	0.01	-0.01*
Indicator for Dissent >20%	0.15	0.16	0.17	0.01	0.03	-0.01
Progression on the Board:						
On Board After 3 Yrs	0.69	0.68	0.73	-0.01	0.04*	-0.04**
Indep Chair After 3 Yrs	0.04	0.04	0.06	-0.01	0.02	-0.02**
# Committees After 3 Yrs	1.88	1.86	1.94	-0.02	0.06	-0.08**
Committee Chair After 3 Yrs	0.40	0.33	0.37	-0.07***	-0.02	-0.04*

Panel B. Multivariate Analysis

	Dependent Variables				
Variable	*(1) Indicator for Dissent >20%*	*(2) On Board After 3 Yrs*	*(3) Indep Chair After 3 Yrs*	*(4) # Committees After 3 Yrs*	*(5) Committee Chair After 3 Yrs*
Source of Recommendation					
SF-recommended	-0.027**	-0.023	-0.004	0.005	-0.041*
	(-2.18)	(-1.53)	(-0.47)	(0.14)	(-1.90)
CEO-recommended	0.044**	0.013	0.013	0.044	-0.036
	(2.58)	(0.71)	(1.07)	(0.97)	(-1.34)
Firm Characteristics					
log(Total Asset)	-0.021***	0.021***	-0.005**	-0.007	-0.025***
	(-6.72)	(5.40)	(-2.21)	(-0.77)	(-4.60)
Book-to-Market	0.022	-0.060***	0.007	0.228***	0.068***
	(1.39)	(-3.29)	(0.55)	(5.21)	(2.60)
ROA	-0.123***	0.101***	-0.017	0.252***	-0.074
	(-3.48)	(2.69)	(-1.10)	(3.20)	(-1.33)
Abnormal Return	-0.006	-0.020	0.005	-0.065	-0.006
	(-0.36)	(-1.18)	(0.36)	(-1.57)	(-0.25)
Constant	0.292***	0.562***	0.079***	1.810***	0.563***
	(10.17)	(16.56)	(3.73)	(22.12)	(11.43)
F-Test (SF = CEO)	0.00***	0.04**	0.14	0.32	0.82
Industry FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Observations	3,861	4,137	2,874	2,874	2,874
Adj. R-Square	0.062	0.277	0.003	0.102	0.019

Notes: This table reports the analyses on recommending source and performance of NID. Panel A reports three sets of data: (i) shareholder voting dissent experienced by NID at the focal firm subsequent to their appointment; (ii) shareholder voting dissent experienced by NID at other firms where they held a board seat, prior to their appointment to the focal firms; and (iii) measures of progression of NID on the board of the focal firm subsequent to joining it. Column (1) to (3) reports the mean of variables when the source of recommendation is independent director(s) (ID), search firm (SF), or CEO and executives (CEO), respectively. Column (4) reports the difference in mean variables between NID recommended, respectively, by SF and ID. Column (5) reports the difference in mean variables between NID recommended, respectively, by CEO and ID. Column (6) reports the difference in mean variables between NID recommended, respectively, by SF and CEO. Note that the N reported in the top row refers to the variable with the highest number of observations. *, **, *** represent significance levels of 0.1, 0.05, 0.01, respectively, for two-tailed tests of differences from zero. Panel B presents a multivariate analysis where in each column the dependent variable is a selected variable from Panel A, and the independent variables include indicators for SF-recommended and CEO-recommended NID, firm financial characteristics, as well as industry and year fixed effects. The F-Test row reports the p-value for a significance test of the difference between the coefficients of SF-recommended and CEO-recommended. See Appendix 4 for variable definitions. *, **, *** represent significance levels of 0.1, 0.05, 0.01, respectively. Standard errors are clustered by firm.

Internet Appendix

IA. Table 1 Determinants of Decision to "Never Disclose" the NID Recommending Source - Univariate Analysis

	Mean		*Diff. in Means*
	(1) ***Never Discloser*** ***(n=5,277)***	***(2)*** ***Discloser*** ***(n=5,246)***	***(3)*** ***= (1) - (2)***
Firm Characteristics			
Total Asset	6,334.55	17,600.35	-11265.80***
Book-to-Market	0.56	0.51	0.04***
ROA	-0.02	0.05	-0.07***
Abnormal Return	0.04	0.04	0.00
Governance and Board Characteristics			
Institutional Ownership	0.65	0.75	-0.10***
Board Size	8.40	9.35	-0.95***
Board Independence (%)	0.83	0.86	-0.03***
Women on Board (%)	0.11	0.15	-0.04***
CEO/ID Avg Network	0.77	0.74	0.02
CEO-Chair	0.38	0.43	-0.05***
CEO Tenure	4.71	4.91	-0.19**
NID Average Characteristics			
Age 70+	0.05	0.03	0.02***
Female	0.28	0.31	-0.03***
C-suite Experience	0.37	0.45	-0.08***
Rookie Director	0.51	0.41	0.11***
1st Degree Connection to CEO	0.19	0.20	-0.01
1st or 2nd Degree Conn. to Board	0.64	0.74	-0.10***

Notes: This table reports the mean of firm characteristics and NID characteristics for Never Disclosers (all firm-year observations of firms that never disclose the NID recommending source during the sample period; column 1) and Disclosers (all firm-year observations of firms that disclose the NID recommending source at least once during the sample period; column 2), as well as a univariate test for the difference in means (column 3). The unit of analysis is at the firm-year level. Thus, in the case of firms with multiple NID in the same firm-year, the firm-year NID characteristics are computed as the mean value across all the NID in that firm-year. *, **, *** represent significance levels of 0.1, 0.05, 0.01, respectively, for two-tailed tests of differences.

IA. Table 2 Frequency of Recommending Sources of NID – Role of Firm Size

Description	**Large Firms *(N=2,795)*** *(total asset above median)*		**Small Firms *(N=2,795)*** *(total asset below median)*	
	#	***%***	***#***	***%***
Search Firm	1,387	49.6%	962	34.4%
Independent director(s)	748	26.8%	869	31.1%
CEO	354	12.7%	469	16.8%
Other executive(s)	156	5.6%	135	4.8%
Shareholders	236	8.4%	310	11.1%
Others	179	6.4%	255	9.1%

Notes: this table replicates the first two columns of Table 4 by partitioning the full sample of NID with disclosure based on the respective firm's total assets, with 'Large Firms' and 'Small Firms', denoting respectively, firms with above and below median total assets. Large Firms have median total assets of $13.5 billion, vs. $0.8 billion for Small Firms. As in Table 4, the NID recommended by multiple sources are counted within each of the recommending sources. Thus, the sum of the percentages in the second and fourth column is higher than 100%.

IA. Table 3 Recommending Source and Firm Characteristics
Panel A. Subsample with Total Asset Above Sample Median

	Mean			*Diff. in Means*		
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
Source of recommendation	*ID*	*SF*	*CEO*	*(2)-(1)*	*(3)-(1)*	*(2)-(3)*
Variables	*(n=581)*	*(n=1,298)*	*(n=349)*	*SF vs. ID*	*CEO vs. ID*	*SF vs. CEO*
Firm Financial Characteristics:						
Total Assets	41,940.16	43,065.81	36,383.70	1,125.65	-5,556.46	6,682.11*
Book-to-Market	0.52	0.49	0.48	-0.03	-0.04	0.01
ROA	0.08	0.09	0.08	0.01***	-0.00	0.01***
Abnormal Return	0.03	0.04	0.02	0.01	-0.01	0.02
Governance and Board Characteristics:						
Institutional Ownership	0.76	0.79	0.78	0.03***	0.02*	0.01
Board Size	10.88	10.63	10.35	-0.25**	-0.53***	0.28**
Board Independence (%)	0.87	0.89	0.86	0.01***	-0.01***	0.03***
Women on Board (%)	0.16	0.19	0.16	0.03***	-0.00	0.03***
ID Avg Network	391.58	456.18	362.75	64.60***	-28.83*	93.43***
CEO Network	294.85	326.13	330.53	31.28**	35.67	-4.40
CEO/ID Avg Network	0.80	0.72	0.89	-0.08**	0.09*	-0.17***
CEO-Chair	0.50	0.51	0.62	0.01	0.12***	-0.11***
CEO Tenure	5.07	4.67	5.90	-0.40*	0.83***	-1.23***

Panel B. Subsample with Total Asset Below Median

	Mean			*Diff. in Means*		
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
Source of recommendation	*ID*	*SF*	*CEO*	*(2)-(1)*	*(3)-(1)*	*(2)-(3)*
Variables	*(n=710)*	*(n=928)*	*(n=440)*	*SF vs. ID*	*CEO vs. ID*	*SF vs. CEO*
Firm Financial Characteristics						
Total Assets	1,034.10	1,384.45	866.24	350.35***	-167.86***	518.21***
Book-to-Market	0.56	0.42	0.54	-0.13***	-0.02	-0.12***
ROA	-0.04	0.02	-0.03	0.06***	0.01	0.05***
Abnormal Return	0.03	0.07	0.06	0.05*	0.03	0.01
Governance and Board Characteristics						
Institutional Ownership	0.64	0.80	0.58	0.16***	-0.06***	0.22***
Board Size	8.07	8.30	7.77	0.22**	-0.30***	0.53***
Board Independence (%)	0.84	0.85	0.81	0.02***	-0.02***	0.04***
Women on Board (%)	0.11	0.14	0.10	0.03***	-0.01	0.04***
ID Avg Network	194.35	248.10	172.98	53.75***	-21.37**	75.12***
CEO Network	119.53	151.91	109.23	32.37***	-10.30	42.67***
CEO/ID Avg Network	0.72	0.67	0.77	-0.05	0.05	-0.10**
CEO-Chair	0.31	0.29	0.45	-0.03	0.14***	-0.16***
CEO Tenure	4.30	4.11	5.14	-0.20	0.83***	-1.03***

Notes: This tables replicates Table 5, Panel B, separately for the subset of firms with total assets above sample median (Panel A) and below sample median (Panel B).

IA. Table 4 Recommending Source and Characteristics/Performance of NID (Firms with Total Assets Below Sample Median)
Panel A. Recommending Source and Characteristics of NID

	Mean			*Diff. in Means*		
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
Source of recommendation	*ID*	*SF*	*CEO*	*(2)-(1)*	*(3)-(1)*	*(2)-(3)*
Variables	*(n=710)*	*(n=928)*	*(n=440)*	*SF vs. ID*	*CEO vs. ID*	*SF vs. CEO*
Demographics and Education Background						
Age	57.43	56.27	57.23	-1.16***	-0.20	-0.96**
Age 70+	0.05	0.01	0.05	-0.05***	-0.00	-0.04***
Female	0.29	0.38	0.22	0.09***	-0.07***	0.16***
Non-White	0.07	0.08	0.07	0.01	0.00	0.01
MBA/Master	0.34	0.45	0.31	0.10***	-0.03	0.14***
Executive Experience						
CEO Experience	0.17	0.28	0.18	0.11***	0.01	0.10***
C-suite Experience	0.36	0.59	0.31	0.23***	-0.05*	0.28***
Board Experience						
Rookie Director	0.50	0.36	0.52	-0.15***	0.02	-0.16***
# Board Seats	2.57	2.32	2.77	-0.25	0.19	-0.45**
# Cumul Yrs on Boards	10.13	8.19	10.58	-1.94***	0.45	-2.39**
# Committees	4.36	3.84	4.23	-0.52*	-0.13	-0.39
% Committees as Chair	0.19	0.13	0.17	-0.06***	-0.02	-0.04**
Indep Chair	0.14	0.11	0.10	-0.03	-0.04	0.01
Connectedness						
1st Degree Connection to Board	0.45	0.26	0.33	-0.19***	-0.12***	-0.07**
1st Degree Connection to CEO	0.25	0.19	0.28	-0.06***	0.03	-0.09***
% w/1st Degree Connection to CEO	0.55	0.73	0.85	0.18***	0.30***	-0.12***
2nd Degree Connection to Board	0.27	0.52	0.29	0.25***	0.02	0.23***
1st or 2nd Degree Connection to Board	0.72	0.78	0.62	0.06***	-0.10***	0.16***
Network Size	204.04	259.28	183.73	55.24***	-20.31	75.55***

Panel B. Recommending Source and Performance of NID

	Mean			*Diff. in Means*		
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
Source of recommendation	*ID*	*SF*	*CEO*	*(2)-(1)*	*(3)-(1)*	*(2)-(3)*
Variables	*(n=710)*	*(n=928)*	*(n=440)*	*SF vs. ID*	*CEO vs. ID*	*SF vs. CEO*
Shareholder Votes at Focal Firm Post-Appointment						
# Annual Meetings with a Vote	4.07	3.96	4.43	-0.11	0.36**	-0.47***
% Meetings with Dissent >20%	0.07	0.06	0.09	-0.02*	0.02	-0.04***
Indicator for Dissent >20%	0.18	0.13	0.24	-0.05***	0.06**	-0.11***
Shareholder Votes at Other Firms Pre-Appointment						
# Annual Meetings with a Vote	5.70	5.81	4.91	0.11	-0.80	0.90*
% Meetings with Dissent >20%	0.04	0.04	0.05	-0.00	0.01	-0.01
Indicator for Dissent >20%	0.17	0.18	0.19	0.01	0.02	-0.01
Progression on the Board						
On Board After 3 Yrs	0.64	0.64	0.71	0.00	0.06**	-0.06**
Indep Chair After 3 Yrs	0.05	0.05	0.06	0.00	0.01	-0.01
# Committees After 3 Yrs	1.84	1.80	1.93	-0.03	0.09	-0.13**
Committee Chair After 3 Yrs	0.47	0.35	0.44	-0.12***	-0.03	-0.09***

Notes: Panel A replicates Table 5, Panel A, for the subset of firms with total assets below sample median. Panel B replicates Table 7, Panel A, for the subset of firms with total assets below sample median.

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