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Activist-Appointed Directors

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Abstract

We examine the value impact of independent directors nominated by activists (Activist IDs). Firms appointing Activist IDs experience larger value increases than firms appointing other directors, particularly when Activist IDs have private firm experience and when their nominators remain as shareholders. This value increase persists over a long period and is greater than that of activism events without director appointments. The increase is also higher among firms with greater monitoring needs and entrenched boards. Moreover, the appointments of Activist IDs are greeted more positively by the market, and Activist IDs obtain more favorable shareholder votes and additional future directorships.

I. Introduction

The number of shareholder activism events increased by almost 30% from 2006 to 2015. Activist shareholders often seek to gain board seats at target firms, which is an important way to influence target management (Brav, Jinag, Partnoy, and Thomas (2008), Kaplan and Strömberg (2009), and Chen, Kang, Kim, and Na (2014)).[1] Despite the increasing importance of board representation as part of the activism process, there is scarce evidence on who these activist-appointed directors

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[1]According to the SharkWatch database, the proportion of activism events involving board representation increases from 15% to 24% over our sample period, and approximately one-third of the activist-appointed directors are first-time directors.

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are, how they are different from board-nominated directors, and whether they affect firm value and board functioning differently from other directors.

In this article, we fill this void by studying whether the background and expertise of independent directors who are appointed through shareholder activism events (Activist IDs), such as dissident shareholders' proxy contests and private negotiations with management/the board of directors and their effects on firms are different from those of independent directors nominated by the incumbent board (Nonactivist IDs). Given that a significant portion of Activist IDs are first-time independent directors who have no prior boardroom experience (Activist Rookie IDs), we also examine whether Activist Rookie IDs affect firm value differently from first-time independent directors nominated by the incumbent board (Nonactivist Rookie IDs).

Activist shareholders have strong incentives to appoint qualified candidates to boards to effectively monitor target managers and implement tactics required to enhance performance. Activist shareholders, who tend to target small, risky firms (e.g., Brav et al. (2008)), are likely to face difficulties in choosing more established directors from the conventional director labor pool, which comprises mainly current executives of public U.S. firms (Linck, Netter, and Yang (2009), Masulis and Mobbs (2011)). Because directors, especially reputable directors, often shun small, risky firms (Fahlenbrach, Low, and Stulz (2010)), activist shareholders must extend their search beyond executives of public firms to find potentially qualified directors, including rookie directors. Thus, Activist IDs, who tend to come from an unconventional pool relative to board-nominated directors, are expected to bring a broader range of perspectives to the boardroom and are more likely to challenge the existing norms. Moreover, as representatives of activist shareholders whose objective is to enhance firm performance through governance, financial, and operational changes (e.g., Brav, Jiang, and Kim (2015)), Activist IDs should have stronger incentives to maximize shareholder wealth, particularly that of their nominators, than Nonactivist IDs.[2] Nonactivist IDs tend to be more sympathetic to management (Coles, Daniel, and Naveen (2014)) and less likely to challenge inefficient management due to their relationship with the nominators (Shivdasani and Yermack (1999), Fracassi and Tate (2012)). In contrast, Activist IDs who have fewer ties to the current network of incumbent directors can provide more independent views in setting the corporate agenda. Finally, because of their affiliation and interaction with activist shareholders, Activist IDs can acquire relevant monitoring skills from these shareholders and use these skills to perform their role more effectively. They are also likely to have a more authoritative voice in the boardroom because they are backed by activist shareholders and thus can exert a stronger influence on management than board-nominated directors. The support of activist shareholders is especially important for newly appointed directors who might otherwise defer to the CEO and existing directors when making important board decisions. These benefits that arise from close ties to activist shareholders are expected to be particularly great for Activist Rookie IDs, who may often have to rely on their sponsors for actions and advice due to their boardroom inexperience.

[2]However, some critics argue that activist investors tend to pursue strategies that generate short-term gains at the expense of long-term shareholder value (e.g., Bebchuk, Brav, and Jiang (2015)).

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In sum, Activist IDs differ from other directors in that they can bring independent and broad perspectives to the boardroom and can lean on the authority of their activist sponsors. Thus, compared to the appointments of other directors, the appointments of Activist IDs should lead to higher firm value, especially when these Activist IDs can offer broader views due to their unique experience and background and when they are supported by activist shareholders who have strong incentives to monitor managers due to their financial claims and activism goals. The value-enhancing impact of Activist IDs should also be more evident for firms that have greater monitoring needs and firms whose board members are more entrenched. To the extent that Activist IDs help improve shareholder wealth, we also expect that compared to Nonactivist IDs, shareholders will view the appointments of Activist IDs more favorably and the director labor market will reward Activist IDs with more board seats for their expertise and skills obtained from serving on the target firm. In particular, we expect this more positive assessment by shareholders and the director labor market to be more evident among Activist Rookie IDs than Nonactivist Rookie IDs. We find that the results are largely consistent with these predictions.

We first document that a significant fraction of Activist IDs comes from a nontraditional source of the director pool. Specifically, using a sample of 20,194 independent director appointments from 2006 to 2015, we find that the proportion of Activist IDs who have current or past executive experience in private U.S. firms is significantly higher than that of corresponding Nonactivist IDs. In particular, 41% of Activist IDs are current executives of private U.S. firms, compared to 28% of Nonactivist IDs. In contrast, Activist IDs are rarely current executives of public U.S. firms. Thus, many Activist IDs come from private U.S. firms, which have not been considered a conventional source of the director labor pool in prior studies. We also find that Activist IDs are younger and less socially connected to the CEO, which indicates that they are less likely to share existing board networks with incumbent directors and management.

To assess how Activist IDs and other independent directors affect firm value differently, we first compare their valuation effects by using Tobin's q as the measure of firm value. After controlling for firm and year fixed effects and various firm and board characteristics, we find that firms whose boards have newly appointed Activist IDs experience a larger increase in firm value relative to the same firms whose boards have no newly appointed independent directors. Their value increase is also larger than the value increase of firms whose boards have newly appointed Nonactivist IDs. These results are particularly evident when Activist IDs have executive experience at private U.S. firms, suggesting that the unconventional background of Activist IDs helps them bring diverse perspectives on firm policies and new ideas to the boardroom. We further find that the positive value impact of Activist IDs is more pronounced than that of Nonactivist IDs, when their nominating shareholders continue to hold an equity stake in the target firm.

Importantly, we find that the value increase associated with the appointments of Activist IDs persists beyond 5 years, which indicates that the valuation effects of Activist IDs are not short-lived. The long-term value impacts are especially evident when Activist IDs have private firm executive experience. However, the long-term value impacts are not contingent on the presence of nominating activists as target shareholders. This result, together with the findings on short-term value impacts,

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suggests that the value-enhancing role of Activist IDs goes beyond that of their sponsors and that the support of activist shareholders is most important during the initial appointment period, when newcomers to a board may have less influence on their own.

Consistent with our expectations, we also find that the increase in firm value is more pronounced when Activist IDs are appointed to firms that have greater agency problems, such as overinvestment firms, firms with lower dividend payouts, and firms with higher free cash flow problems, and to firms whose boards are more entrenched, such as boards with a higher proportion of long-serving independent directors and boards whose independent directors are socially tied to the CEO.

To mitigate the concern that our results may be driven by other observable omitted firm characteristics, we perform 2 sets of propensity score matching analyses. First, to rule out the possibility that our results simply reflect the general valuation effects of activist intervention events, we conduct an analysis in which we match each firm that appoints Activist IDs to a control firm that experiences an activism campaign not involving dissident shareholders' director appointments. We find that firms appointing Activist IDs experience significantly higher increases in Tobin's q than control firms in the post-activism period, which suggests that the impact of Activist IDs on firm value is incremental to the impact of pure activism events without director appointments. We also perform multivariate regression analyses and find that targets of activism campaigns involving Activist ID appointments experience a larger increase in firm value than do targets of activist campaigns not involving such appointments. These results are consistent with those of prior studies that highlight the importance of gaining board representation in target firms as part of the activism process to monitor the target's managers more effectively (e.g., Chen et al. (2014)).

Second, we perform an analysis in which we match each firm that appoints Activist IDs to a control firm that appoints Nonactivist IDs by using matching covariates that determine the likelihood of activist intervention. We find that an increase in Tobin's q is higher for firms that appoint Activist IDs than for control firms that appoint Nonactivist IDs, alleviating the concern that our results are driven by omitted variable bias problems.

Next, we conduct director-level analyses. We find that announcement returns are higher when firms appoint Activist IDs than when they appoint Nonactivist IDs. Using directors' first uncontested voting outcome, we also find that shareholders cast votes more favorably for Activist IDs than for Nonactivist IDs. We further find that Activist IDs are more likely to be rewarded for an improvement in appointing firms' performance with additional directorships within 3 years of their appointment. These results suggest that the shareholders' ex ante perception of value-enhancing abilities is higher for Activist IDs than for board-nominated independent directors, and ex post, the labor market rewards well-performing directors with additional appointments.

Finally, turning to the comparison between Activist Rookie IDs and Nonactivist Rookie IDs, we find that the stock market greets the appointments of Activist Rookie IDs more positively than the appointments of Nonactivist Rookie IDs.

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We also find that Activist Rookie IDs receive more favorable shareholder votes than Nonactivist Rookie IDs. Additionally, Activist Rookie IDs are more likely to obtain additional directorships in other firms within 3 years of their first appointments than Nonactivist Rookie IDs, which suggests that the director labor market positively assesses Activist Rookie IDs' unique role.

Our study contributes to the literature in several important ways. First, our study sheds new light on the role of activist shareholders in providing qualified directors to firms. Chen and Moers (2018) document an influx of rookie directors post-Sarbanes-Oxley (SOX) in response to the decreasing supply of qualified seasoned directors and increasing demand for independent directors. However, little is known about how firms recruit these qualified directors (particularly first-time directors), who these directors are, and what roles they play. We provide evidence on the role of activist shareholders in discovering qualified directors who go on to be highly sought-after directors in the director labor market. In particular, we find that activist shareholders tend to source their director candidates from unconventional director pools, especially private U.S. firms.

Second, we provide new evidence on the value-enhancing role of Activist IDs. While most prior studies focus on the performance, experience, and ability of independent directors nominated by the incumbent board (e.g., Cai, Garner, and Walking (2009), Akyol and Cohen (2013)), we focus on independent directors nominated by activist shareholders and show that as active monitors, these Activist IDs improve firm value more than independent directors nominated by the incumbent board. We also find that the power of dissident shareholders to nominate their directors to target boards helps improve board functioning and shareholder value, particularly for firms with higher managerial agency problems and firms with entrenched boards.

Third, our article contributes to the literature on the source of value gains in shareholder activism. Gaining board seats at target firms is an increasingly important tactic of shareholder activism (Brav et al. (2008), Kaplan and Strömberg (2009), and Chen et al. (2014)). However, little is known about how such board representation affects the short- and long-term value of target firms and whether the value impacts of activism are different between activism events with and without board representation. We document that firms appointing Activist IDs experience a larger increase in firm value both in the short and long term and that these value increases for firms appointing Activist IDs are greater than those for firms experiencing activism events without board representation. The results complement those of Goodwin, Singh, Slipetz, and Rao (2014), who show that activist shareholders' board representation sends a signal of these shareholders' long-term commitment to target firms, highlighting the importance of board representation as an integral part of shareholder activism.

The remainder of the article proceeds as follows: Section II describes our sample and key variables. Section III presents firm-level analysis results and examines potential factors that determine the value impact of Activist ID appointments. Sections IV and V address endogeneity issues and provide director-level analysis results, respectively. In Section VI, we compare the value impacts of Activist Rookie IDs and Nonactivist Rookie IDs. Section VII concludes.

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II. Sample and Variable Definition

A. Sample

We first match BoardEx firms to firms covered in Compustat and CRSP and refer to the resulting matched data set as the BoardEx-Compustat-CRSP merged database. We then restrict the sample period to the years 2006–2015, as complete data on activist campaigns against all U.S. incorporated firms from SharkWatch are available starting in 2006. We use the SharkWatch database to identify firms targeted by activist campaigns and directors nominated by activist shareholders during such campaigns. Other information on the boards of directors and their appointments and employment records are from BoardEx. We obtain financial and stock return data from Compustat and CRSP, respectively. We exclude firms in the financial and utility industries. After requiring nonmissing values for the key variables, our final sample consists of 22,248 firm-year observations for 3,940 unique firms.

Next, we obtain a sample of independent director appointments and exclude appointments if there are 5 other concurrent appointments of new directors in the same year, as such appointments are likely related to major corporate events (Fahlenbrach et al. (2010)).[3] This restriction yields a final sample of 20,194 independent director appointments.

Institutional ownership information comes from the Thomson 13F database. We obtain information on director appointment announcement dates from the Audit Analytics Director and Officer Changes database and information on director election voting outcomes from the Institutional Shareholder Services (ISS) Voting Analytics database.

B. Classification of Directors by Nominators

We classify newly appointed independent directors by the identity of their nominators using information from the SharkWatch database. In cases where the identity of nominators is unclear, such as when directors are nominated via private negotiations, we obtain the information by reading through each event synopsis provided by the database. We refer to independent directors who are nominated by dissident shareholders initiating activism campaigns against the target firm as Activist IDs and those who are nominated by the incumbent board as Nonactivist IDs.

In Table 1, we present the distribution of independent director appointments by year. Activist IDs account for 3.5% of all independent director appointments. The proportion of Activist IDs increases from 2.4% in 2006 to 5.3% in 2015, although there is a decrease in 2010 and 2011.

[3]Mergers and acquisitions (M&As) and other restructuring events can lead to the concurrent appointments of multiple directors, although the number is fewer than 5. To rule out the possibility that our results are driven by Activist IDs appointed around M&A events, we obtain information on M&As from the Securities Data Company Platinum database and conduct 2 separate tests. First, we repeat the main analyses after excluding independent director appointments around M&A events and find that the results are robust. Second, we focus only on directors appointed around M&As and repeat the main analyses, and we find that Activist ID appointments during such events have little impact on firm value.

TABLE 1

Distribution of Independent Director Appointments

Table 1 presents the frequency of independent director appointments at firms in the BoardEx-Compustat-CRSP merged database by nominee type from 2006 to 2015. Activist ID is an independent director nominated by a dissident shareholder targeting the firm in an activist campaign (e.g., proxy contest or negotiation between the incumbent board and dissident shareholders). Nonactivist ID is an independent director nominated by the incumbent board. Column 1 reports the total number of independent director appointments. Columns 2 and 3 report the numbers of Activist ID appointments and Nonactivist ID appointments, respectively. The numbers in parentheses are the percentage of directors in each category by year.

	Total	Activist IDs	Nonactivist IDs
Year	1	2	3
2006	2,618	62	2,556
		(2.4)	(97.6)
2007	2,544	66	2,478
		(2.6)	(97.4)
2008	1,986	79	1,907
		(4.0)	(96.0)
2009	1,630	83	1,547
		(5.1)	(94.9)
2010	1,749	43	1,706
		(2.5)	(97.5)
2011	1,825	34	1,791
		(1.9)	(98.1)
2012	1,764	60	1,704
		(3.4)	(96.6)
2013	1,961	78	1,883
		(4.0)	(96.0)
2014	2,117	88	2,029
		(4.2)	(95.8)
2015	2,000	106	1,894
		(5.3)	(94.7)
Total	20,194	699	19,495
		(3.5)	(96.5)

C. Summary Statistics

Panel A of Table 2 presents summary statistics on the characteristics of the independent directors appointed from 2006 to 2015. The Appendix provides detailed variable descriptions. We winsorize all continuous variables at the 1% level in both tails by year. Supporting our conjecture that shareholder activists recruit candidates from a pool beyond the conventional director supply source, we find that a significant portion of Activist IDs originates from private U.S. firms: 40.8% of appointed Activist IDs are current executives of private U.S. firms at the time of appointment, while only 27.8% of Nonactivist IDs have such a background. In contrast, 6.3% of Activist IDs are current executives of public U.S. firms at the time of appointment, while more than 11% of Nonactivist IDs work for public U.S. firms when appointed. Similarly, the proportion of Activist IDs who have either past or current executive experience at private (public) U.S. firms is higher (lower) than the corresponding proportion for Nonactivist IDs. We also find that compared to Nonactivist IDs, Activist IDs have more general managerial skills[4] and

[4]We follow Custódio, Ferreira, and Matos (2013) when measuring the general ability index of directors. Among the 5 proxies used to measure general managerial ability, we replace CEO experience with executive experience because rookie directors are unlikely to be CEOs in other firms. Rookie directors by definition have no prior boardroom experience, but most CEOs serve as inside directors of their own firms.

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TABLE 2
Summary Statistics

Table 2 presents summary statistics for a sample of 20,194 independent director appointments (Panel A) and 15,060 firm-year observations with at least 1 independent director appointed within the last 3 years (Panel B) in the BoardEx-Compustat-CRSP merged database from 2006 to 2015. In column 1 of Panel A, we provide the statistics for the full sample of independent director appointments. In columns 2 and 3 of Panel A, we divide the full sample of independent director appointments into Activist IDs (independent directors nominated by a dissident shareholder) and Nonactivist IDs (independent directors nominated by the incumbent board). In column 1 of Panel B, we include the full sample of firm-year observations with at least 1 independent director appointed within the last 3 years. In columns 2 and 3 of Panel B, we divide the full sample of firm-year observations into subsamples based on the type of directors appointed: Activist ID Firms (firm-years in which the board has at least 1 newly appointed Activist ID) and Nonactivist ID Firms (firm-years in which the board has at least 1 newly appointed Nonactivist ID but no newly appointed Activist IDs). We consider a director to be newly appointed if the appointment occurred within the last 3 years. The Appendix provides detailed variable descriptions. The *p*-value of the test of difference is based on a *t*-test for equality of means. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Summary Characteristics (Mean) of Firms, Boards, and CEOs

Variable	All Independent Directors (N = 20,194)	Activist IDs (N = 699)	Nonactivist IDs (N = 19,495)	Test of Difference (p-value)
	1	2	3	2–3
Director Characteristics				
DIRECTOR_WITH_PUBLIC_US_FIRM_EXPERIENCE	0.514	0.438	0.517	0.00***
EXPERIENCE_AS_EXECUTIVE_OF_PUBLIC_US_FIRM	0.111	0.063	0.112	0.00***
DIRECTOR_WITH_PRIVATE_US_FIRM_EXPERIENCE	0.709	0.777	0.706	0.00***
EXPERIENCE_AS_EXECUTIVE_OF_PRIVATE_US_FIRM	0.282	0.408	0.278	0.00***
DIRECTOR'S_GENERAL_ABILITY_INDEX	−0.004	0.146	−0.010	0.02**
DIRECTOR_WITH_FINANCE_EXPERIENCE	0.439	0.505	0.437	0.00***
DIRECTOR_WITH_RELATED_INDUSTRY_EXPERIENCE	0.317	0.253	0.319	0.00***
DIRECTOR_WITH_TECHNOLOGY_BACKGROUND	0.385	0.302	0.388	0.00***
NUMBER_OF_DIRECTORSHIPS	0.762	1.000	0.753	0.00***
DIRECTOR_WITH_SOCIAL_TIES_TO_CEO	0.096	0.025	0.099	0.00***
DIRECTOR_WITH_MBA_DEGREE	0.265	0.293	0.264	0.09*
DIRECTOR_FROM_IVY_LEAGUE_SCHOOLS	0.233	0.326	0.230	0.00***
FEMALE_DIRECTOR	0.139	0.027	0.143	0.00***
DIRECTOR_AGE (years)	55.352	51.482	55.491	0.00***
Activist Director Characteristics				
DIRECTOR_EMPLOYED_BY_DISSIDENT	–	0.156	–	–
NOMINATING_DISSIDENT_SHAREHOLDER_OWNERSHIP (%)	–	10.600	–	–
DIRECTOR_NOMINATED_BY_HEDGE_FUNDS	–	0.770	–	–

Panel B. Summary Characteristics (Mean) of Firms, Boards, and CEOs

	Full Sample of Firms (N = 15,060)	Activist ID Firms (N = 492)	Nonactivist ID Firms (N = 14,568)	Test of Difference (p-value)
	1	2	3	2–3
Firm Characteristics				
MARKET_VALUE_OF_EQUITY ($ billion)	2.247	1.403	2.275	0.00***
BOOK_LEVERAGE	0.217	0.199	0.218	0.06*
ROA	0.065	0.044	0.066	0.05**
INDUSTRY-ADJUSTED_RETURN	0.047	0.068	0.046	0.53
CAPX_TO_ASSETS	0.052	0.050	0.052	0.38
R&D_TO_ASSETS	0.061	0.058	0.062	0.48
FIRM_AGE	23.038	27.717	22.880	0.00***
RETURN_VOLATILITY	0.033	0.035	0.033	0.00***
PAYOUT_RATIO	0.031	0.033	0.031	0.30
HIGH_FCF_LOW_TOBIN'S_Q	0.045	0.035	0.046	0.27
Board/Governance Characteristics				
BOARD_SIZE	8.437	8.504	8.435	0.48
DEPARTURE_OF_DIRECTORS	0.582	0.657	0.580	0.00***
PROPORTION_OF_INDEPENDENT_DIRECTORS	0.781	0.817	0.780	0.00***
PROPORTION_OF_DIRECTORS_WITH_RELATED_INDUSTRY_EXPERIENCE	0.313	0.342	0.312	0.01***
PROPORTION_OF_DIRECTORS_WITH_FINANCE_EXPERIENCE	0.442	0.466	0.441	0.01**
PROPORTION_OF_DIRECTORS_WITH_TECHNOLOGY_BACKGROUND	0.373	0.404	0.372	0.01***
PROPORTION_OF_DIRECTORS_WITH_EXECUTIVE_EXPERIENCE	0.498	0.500	0.498	0.82
PROPORTION_OF_DIRECTORS_WITH_HIGH_GENERAL_ABILITY_INDEX	0.483	0.484	0.483	0.95
PROPORTION_OF_BUSY_DIRECTORS	0.201	0.204	0.201	0.74
PROPORTION_OF_DIRECTORS_WITH_MBA_DEGREE	0.240	0.245	0.239	0.48
PROPORTION_OF_DIRECTORS_FROM_IVY_LEAGUE_SCHOOLS	0.217	0.221	0.217	0.64
PROPORTION_OF_FEMALE_DIRECTORS	0.119	0.097	0.120	0.00***
LONG-TERM_INDEPENDENT_INSTITUTIONAL_BLOCK_OWNERSHIP	0.145	0.174	0.144	0.00***
CEO Characteristics				
CEO-CHAIR_DUALITY	0.443	0.291	0.448	0.00***
CEO_AGE (years)	56.209	55.848	56.221	0.31
CEO_TENURE (years)	11.227	10.145	11.262	0.01***

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finance experience but tend to lack related industry experience and a technology background. As expected, Activist IDs are less likely to be socially connected to the CEO than directors hired through the incumbent board's networks. Furthermore, Activist IDs are younger, are more likely to be male, and are more likely to be MBA degree holders and Ivy League graduates than Nonactivist IDs.

Panel A also shows that about 16% of Activist IDs have been employed by the nominating shareholder during the 3 years prior to their appointment. On average, activist shareholders sponsoring Activist IDs hold 10.6% of equity ownership in targets at the start of their activism campaigns. Hedge funds constitute 77% of Activist IDs' nominators.[5]

Panel B of Table 2 presents summary statistics on the firm, board, and CEO characteristics of our sample, classified according to the types of newly appointed directors. We compare firm-years in which the board has at least 1 newly appointed Activist ID (i.e., Activist ID Firms) with those in which the board has at least 1 newly appointed Nonactivist ID (i.e., Nonactivist ID Firms). We consider a director to be newly appointed if the appointment occurred within the last 3 years. Compared to Nonactivist ID Firms, Activist ID Firms are smaller, older, and riskier (i.e., higher stock return volatility), and have lower operating profitability and leverage. However, these 2 groups of firms have similar stock performance, capital expenditures, research and development (R&D) intensity, dividend payout ratios, and free cash flow problems. Free cash flow problems are measured using an indicator for whether the firms have high free cash flow and low Tobin's q. Regarding the board and CEO characteristics, we find that compared to Nonactivist ID Firms, Activist ID Firms have more independent board members, more frequent departures of independent directors, and higher long-term independent institutional block ownership. Independent directors of Activist ID Firms have more related industry, finance, and technology experience than those of Nonactivist ID Firms. Activist ID Firms have fewer female independent directors on the board than Nonactivist ID Firms. We also find that the CEOs of Activist ID Firms are younger, have shorter tenures, and are less likely to serve as board chairs than CEOs of Nonactivist ID Firms.

III. Firm-Level Analysis: Effect of Director Appointments on Firm Value

In this section, we examine the differences in the valuation impacts of appointing Activist IDs and Nonactivist IDs and explore the potential factors that drive such differences.

[5]In untabulated tests, we find that compared to Nonactivist IDs, Activist IDs are significantly more likely to serve on both monitoring and advisory committees after being appointed. The only exception is audit committees, for which the representation is similar between Activist IDs and Nonactivist IDs. Following Faleye, Hoitash, and Hoitash (2011), we include audit, compensation, and nominating/corporate governance committees in monitoring committees and include acquisitions, science and technology, executive, investment, and finance committees in advisory committees. A larger presence of Activist IDs on various board committees indicates Activist IDs' active involvement in major board decision-making processes.

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A. Differences in Valuation Effects of Activist ID and Nonactivist ID Appointments

Table 3 presents the results from a regression analysis of the relation between the presence of newly appointed Activist IDs on the board and Tobin's *q*. Our main independent variable of interest is ACTIVIST_ID_FIRM, which takes the value of 1 for firm-years in which the board has at least 1 newly appointed Activist ID, and 0 otherwise. For a firm to be considered an Activist ID Firm, we require the Activist ID to stay on its board in the measurement year. We define newly appointed directors as directors who were appointed within the last 3 years to allow them to have enough time to contribute to firm value. The omitted group in the regressions is firm-years in which the board has no newly appointed independent directors. We control for several firms, board, and CEO characteristics that are likely to affect firm value. The regressions also include firm and year fixed effects; thus, the regression coefficient on ACTIVIST_ID_FIRM measures the within-firm change in Tobin's *q* when a firm has a newly appointed Activist ID compared to when the same firm does not have any newly appointed independent directors.

In column 1, we compare the changes in firm value between Activist ID Firms and firms that appoint Nonactivist IDs. Thus, we include NONACTIVIST_ID_FIRM, which takes the value of 1 for firm-years in which the board has at least 1 newly appointed Nonactivist ID but no newly appointed Activist IDs, and 0 otherwise, together with ACTIVIST_ID_FIRM, in the regression. We find that the coefficient on ACTIVIST_ID_FIRM is positive (0.066) and significant at the 1% level, which suggests that the firm's Tobin's *q* increases by 6.8% ($e^{0.066}-1$) during the first 3 years after the appointment of an Activist ID relative to when the same firm does not have any newly appointed independent directors. In contrast, the coefficient on NONACTIVIST_ID_FIRM is insignificantly negative and significantly different from the coefficient on ACTIVIST_ID_FIRM (p-value = 0.00). Thus, on average, firms that appoint Activist IDs experience a significantly higher increase in firm value than those that appoint other types of directors.[6]

[6]Some Activist IDs remain on the target board for fewer than 3 years, possibly because their sponsoring shareholders achieve their activism objectives in a relatively short period. To examine whether the results in Table 3 are driven mainly by these transient directors, in untabulated tests, we reestimate column 1 of Table 3 by replacing ACTIVIST_ID_FIRM with 2 indicators: ACTIVIST_ID_FIRM_WITH_TRANSIENT_ACTIVIST_ID (1 for firm-years in which the board has at least 1 Activist ID whose tenure is equal to or shorter than 3 years, and 0 otherwise) and ACTIVIST_ID_FIRM_WITH_LONG-TERM_ACTIVIST_ID (1 for firm-years in which the board has at least 1 Activist ID and none of the Activist IDs' tenure is equal to or shorter than 3 years, and 0 otherwise). Admittedly, using these indicators in the regression can lead to forward-looking bias, as we require knowledge of whether the director remains with the firm for at least 3 years. Nevertheless, we find that only the coefficient on ACTIVIST_ID_FIRM_WITH_LONG-TERM_ACTIVIST_ID is positive and significant, although the difference in the coefficients is statistically insignificant. Thus, Activist IDs' contribution to the improvement in target value shown in column 1 of Table 3 appears to be driven by Activist IDs who stay on the board longer. We also find that Activist IDs are generally not transient directors: the median tenure for appointed Activist IDs is 3 years, which is slightly lower than the median tenure of 4 years for board-nominated directors. Moreover, almost 46% of Activist IDs whose nominating shareholders exit the target firm before 2015, the end of our sample period, continue to remain on the focal board until 2015.

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TABLE 3

Effect of Activist ID Appointments on Firm Value

Table 3 presents estimates of ordinary least squares (OLS) regressions in which the dependent variable is the natural logarithm of Tobin's *q*. The sample consists of 22,248 firm-year observations in the BoardEx-Compustat-CRSP merged database from 2006 to 2015. Activist (Nonactivist) ID is an independent director nominated by a dissident shareholder (the incumbent board). ACTIVIST_ID_FIRM takes the value of 1 for firm-years in which the board has at least 1 newly appointed Activist ID, and 0 otherwise. NONACTIVIST_ID_FIRM takes the value of 1 for firm-years in which the board has at least 1 newly appointed Nonactivist ID but no newly appointed Activist IDs, and 0 otherwise. We consider a director to be newly appointed if the appointment occurred within the last 3 years. In columns 2 and 3, we divide ACTIVIST_ID_FIRM according to whether Activist IDs have worked as an executive of a private U.S. firm and whether they have ties to dissident shareholders, respectively. ACTIVIST_ID_FIRM_WITH_PRIVATE_FIRM_EXPERIENCE takes the value of 1 for firm-years in which the board has at least 1 newly appointed Activist ID who has worked as an executive of a private U.S. firm in the BoardEx database, and 0 otherwise. ACTIVIST_ID_FIRM_WITHOUT_PRIVATE_FIRM_EXPERIENCE takes the value of 1 for firm-years in which the board has at least 1 newly appointed Activist ID and none of the Activist IDs has worked as an executive of a private U.S. firm in the BoardEx database, and 0 otherwise. ACTIVIST_ID_FIRM_WITH (WITHOUT)_DISSIDENT_SHAREHOLDER takes the value of 1 for firm-years in which the board has at least 1 newly appointed Activist ID and her nominating dissident shareholder holds (does not hold) equity in the target firm at the beginning of the year, and 0 otherwise. The omitted group in the regressions is firm-years in which the board has no newly appointed independent directors. The Appendix provides detailed variable descriptions. *p*-values in parentheses are estimated using standard errors that adjust for firm clustering. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	Dependent Variable: log(TOBIN'S_Q)		
Independent Variable	1	2	3
ACTIVIST_ID_FIRM: a	0.066***		
	(0.003)		
ACTIVIST_ID_FIRM_WITH_PRIVATE_FIRM_EXPERIENCE: a		0.065***	
		(0.008)	
ACTIVIST_ID_FIRM_WITHOUT_PRIVATE_FIRM_EXPERIENCE: b		0.069	
		(0.157)	
ACTIVIST_ID_FIRM_WITH_DISSIDENT_SHAREHOLDER: a			0.056**
			(0.029)
ACTIVIST_ID_FIRM_WITHOUT_DISSIDENT_SHAREHOLDER: b			0.058
			(0.238)
NONACTIVIST_ID_FIRM: c	−0.008	−0.008	−0.007
	(0.343)	(0.343)	(0.348)
FIRM_SIZE	0.077***	0.077***	0.077***
	(0.000)	(0.000)	(0.000)
log(FIRM_AGE + 1)	−0.203***	−0.203***	−0.205***
	(0.000)	(0.000)	(0.000)
RETURN_VOLATILITY	2.695***	2.695***	2.721***
	(0.000)	(0.000)	(0.000)
ROA	−0.002	−0.002	−0.003
	(0.954)	(0.954)	(0.950)
log(BOARD_SIZE)	−0.133***	−0.133***	−0.133***
	(0.000)	(0.000)	(0.000)
PROPORTION_OF_INDEPENDENT_DIRECTORS	−0.108*	−0.107*	−0.108*
	(0.094)	(0.094)	(0.094)
CEO-CHAIR_DUALITY	−0.022*	−0.022*	−0.020*
	(0.062)	(0.062)	(0.084)
LONG-TERM_INDEPENDENT_INSTITUTIONAL_BLOCK_OWNERSHIP	−0.199***	−0.199***	−0.199***
	(0.000)	(0.000)	(0.000)
PROPORTION_OF_DIRECTORS_WITH_RELATED_INDUSTRY_EXPERIENCE	0.071	0.071	0.072
	(0.124)	(0.123)	(0.121)
PROPORTION_OF_DIRECTORS_WITH_FINANCE_EXPERIENCE	−0.012	−0.012	−0.010
	(0.737)	(0.737)	(0.789)
PROPORTION_OF_DIRECTORS_WITH_TECHNOLOGY_BACKGROUND	−0.050	−0.050	−0.054
	(0.279)	(0.279)	(0.245)
PROPORTION_OF_DIRECTORS_WITH_EXECUTIVE_EXPERIENCE	0.006	0.006	0.007
	(0.900)	(0.900)	(0.896)
PROPORTION_OF_DIRECTORS_WITH_HIGH_GENERAL_ABILITY _INDEX	−0.021	−0.021	−0.021
	(0.614)	(0.614)	(0.623)
PROPORTION_OF_BUSY_DIRECTORS	−0.053	−0.053	−0.054
	(0.110)	(0.110)	(0.105)
PROPORTION_OF_DIRECTORS_WITH_MBA_DEGREE	0.034	0.034	0.036
	(0.440)	(0.440)	(0.414)
PROPORTION_OF_DIRECTORS_FROM_IVY_LEAGUE_SCHOOLS	0.057	0.057	0.054
	(0.211)	(0.211)	(0.233)
PROPORTION_OF_FEMALE_DIRECTORS	−0.113*	−0.113*	−0.114*
	(0.054)	(0.054)	(0.051)
F-test for the difference between the coefficients (*p*-value):			
a = b		0.95	0.97
a = c	0.00***	0.00***	0.01**
b = c		0.12	0.18
Firm fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
No. of obs.	22,248	22,248	22,217
Adj. R^2	0.731	0.731	0.732

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Next, we examine the types of Activist IDs who are likely to play a more value-enhancing role in target firms. First, we expect Activist IDs to have a greater value-enhancing impact when they have private firm executive experience, which is less common among board-nominated directors. Since prior studies suggest that newcomers with different backgrounds bring diverse perspectives and change the dynamics of groupthink, which hampers the board's oversight role (e.g., Phillips, Liljenquist, and Neale (2009), Coles et al. (2014), and Bernile, Bhagwat, and Yonker (2018)), Activist IDs with a private firm executive background are expected to play a more value-enhancing role than Nonactivist IDs, who tend to share similar backgrounds with existing directors. Second, we expect Activist IDs to have a greater positive impact on target value when their nominating shareholders continue to hold equity in target firms since the presence of nominating shareholders in target firms is likely to help Activist IDs have a more authoritative voice in the boardroom and receive greater support for their actions.

The results are reported in columns 2 and 3 of Table 3. We classify ACTIVIST_ID_FIRM into 2 indicators according to whether the Activist ID has experience as an executive of a private U.S. firm (column 2) and whether the dissident shareholder that nominates the Activist ID continues to hold equity in the target firm at the beginning of the year (column 3). Consistent with our prediction, we find that the coefficient on ACTIVIST_ID_FIRM_WITH_PRIVATE_FIRM_EXPERIENCE is positive and significant, while that on ACTIVIST_ID_FIRM_WITHOUT_PRIVATE_FIRM_EXPERIENCE is insignificant. Moreover, the difference in coefficients between the former variable and NONACTIVIST_ID_FIRM is significant at the 1% level, but the difference in coefficients between the latter variable and NONACTIVIST_ID_FIRM is insignificant. Thus, Activist IDs create more value when they have unconventional experience relative to existing directors. We also find that compared to Nonactivist IDs, Activist IDs are more likely to increase firm value when their sponsoring shareholders continue to hold equity in target firms and thus provide support for Activist IDs' actions.

B. Impact of Activist ID Appointments Over Time

To examine whether the long-term effects of activism on target value documented in prior studies are also evident for activism involving Activist ID appointments,[7] in Table 4, we compare the changes in firm value over the years following the appointments of Activist IDs and Nonactivist IDs. In column 1, we reestimate the regression in column 1 of Table 3 by dividing firms that appointed Activist IDs (Nonactivist IDs) into 5 groups classified according to the director appointment year. $\text{ACTIVIST_ID_FIRM}_{\text{YEAR-N}}$ is an indicator that equals 1 for firm-years in which the board currently has at least 1 Activist ID appointed n years ago, and 0 otherwise. $\text{NONACTIVIST_ID_FIRM}_{\text{YEAR-N}}$ takes the value of 1 for

[7]Some studies document a positive long-term effect of activism on target value, while other studies find no evidence of abnormal post-activism performance improvements. For example, Bebchuk et al. (2015) find that relative to firm value at the time of intervention, firm value improves through the end of the post-intervention 5-year period. In contrast, Cremers, Giambona, Sepe, and Wang (2020) show that the long-term value of targets of hedge fund activism increases less than that of their matched non-targeted firms with similar characteristics.

TABLE 4

Effect of Activist ID Appointments on Firm Value Over Time

Table 4 presents estimates of OLS regressions in which the dependent variable is the natural logarithm of Tobin's *q*. The sample consists of 22,248 firm-year observations in the BoardEx-Compustat-CRSP merged database from 2006 to 2015. Activist (Nonactivist) ID is an independent director nominated by a dissident shareholder (the incumbent board). $\text{ACTIVIST_ID_FIRM}_{\text{YEAR-N}}$ takes the value of 1 for firm-years in which the board currently has at least 1 Activist ID appointed *n* years ago, and 0 otherwise. $\text{NONACTIVIST_ID_FIRM}_{\text{YEAR-N}}$ takes the value of 1 for firm-years in which the board currently has at least 1 Nonactivist ID appointed *n* years ago but no Activist IDs appointed *n* years ago, and 0 otherwise. In columns 2 and 3, we compare the long-term value impacts of Activist ID appointments by dividing $\text{ACTIVIST_ID_FIRM}_{\text{YEAR-N}}$ according to whether Activist IDs have worked as executives in a private U.S. firm or whether they have ties to dissident shareholders, respectively. $\text{ACTIVIST_ID_FIRM}_{\text{YEAR-N}}\text{_WITH_PRIVATE_FIRM_EXPERIENCE}_{\text{YEAR0}}$ takes the value of 1 for firm-years in which the board currently has at least 1 Activist ID appointed *n* years ago who has worked as an executive of a private U.S. firm in the BoardEx database, and 0 otherwise. $\text{ACTIVIST_ID_FIRM}_{\text{YEAR-N}}\text{_WITHOUT_PRIVATE_FIRM_EXPERIENCE}_{\text{YEAR0}}$ takes the value of 1 for firm-years in which the board currently has at least 1 Activist ID appointed *n* years ago and none of the Activist IDs have worked as executives of a private U.S. firm in the BoardEx database, and 0 otherwise. $\text{ACTIVIST_ID_FIRM}_{\text{YEAR-N}}\text{_WITH (WITHOUT)_DISSIDENT_SHAREHOLDER}_{\text{YEAR0}}$ takes the value of 1 for firm-years in which the board currently has at least 1 Activist ID appointed *n* years ago and her nominating dissident shareholder holds (does not hold) equity in the target firm at the beginning of the year, and 0 otherwise. NONACTIVIST_ID_FIRM takes the value of 1 for firm-years in which the board has at least 1 newly appointed Nonactivist ID but no newly appointed Activist IDs, and 0 otherwise. We consider a director to be newly appointed if the appointment occurred within the last 3 years. The regressions include the control variables in Table 3 and firm and year fixed effects. The Appendix provides detailed variable descriptions. *p*-values in parentheses are estimated using standard errors that adjust for firm clustering. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

		Activist ID Firm Characteristics	
		Activist IDs Have Private Firm Executive Experience	Dissident Shareholders Remain as Target Shareholders
Independent Variable	1	2	3
$\text{ACTIVIST_ID_FIRM}_{\text{YEAR-1}}$	0.072***		
	(0.001)		
$\text{ACTIVIST_ID_FIRM}_{\text{YEAR-2}}$	0.079***		
	(0.008)		
$\text{ACTIVIST_ID_FIRM}_{\text{YEAR-3}}$	0.157***		
	(0.000)		
$\text{ACTIVIST_ID_FIRM}_{\text{YEAR-4}}$	0.117***		
	(0.004)		
$\text{ACTIVIST_ID_FIRM}_{\text{YEAR-5_AND_EARLIER}}$	0.155***		
	(0.001)		
$\text{NONACTIVIST_ID_FIRM}_{\text{YEAR-1}}$	0.001		
	(0.897)		
$\text{NONACTIVIST_ID_FIRM}_{\text{YEAR-2}}$	−0.006		
	(0.377)		
$\text{NONACTIVIST_ID_FIRM}_{\text{YEAR-3}}$	0.008		
	(0.241)		
$\text{NONACTIVIST_ID_FIRM}_{\text{YEAR-4}}$	0.010		
	(0.166)		
$\text{NONACTIVIST_ID_FIRM}_{\text{YEAR-5_AND_EARLIER}}$	−0.010		
	(0.352)		
$\text{ACTIVIST_ID_FIRM}_{\text{YEAR-1}}\text{_WITH_CERTAIN_CHARACTERISTIC}_{\text{YEAR0}}$		0.071***	0.054**
		(0.005)	(0.038)
$\text{ACTIVIST_ID_FIRM}_{\text{YEAR-2}}\text{_WITH_CERTAIN_CHARACTERISTIC}_{\text{YEAR0}}$		0.084**	0.055
		(0.012)	(0.118)
$\text{ACTIVIST_ID_FIRM}_{\text{YEAR-3}}\text{_WITH_CERTAIN_CHARACTERISTIC}_{\text{YEAR0}}$		0.152***	0.156***
		(0.000)	(0.000)
$\text{ACTIVIST_ID_FIRM}_{\text{YEAR-4}}\text{_WITH_CERTAIN_CHARACTERISTIC}_{\text{YEAR0}}$		0.091**	0.104**
		(0.044)	(0.037)
$\text{ACTIVIST_ID_FIRM}_{\text{YEAR-5_AND_EARLIER}}\text{_WITH_CERTAIN_CHARACTERISTIC}_{\text{YEAR0}}$		0.185***	0.121**
		(0.000)	(0.032)
$\text{ACTIVIST_ID_FIRM}_{\text{YEAR-1}}\text{_WITHOUT_CERTAIN_CHARACTERISTIC}_{\text{YEAR0}}$		0.054	0.094*
		(0.255)	(0.064)
$\text{ACTIVIST_ID_FIRM}_{\text{YEAR-2}}\text{_WITHOUT_CERTAIN_CHARACTERISTIC}_{\text{YEAR0}}$		0.037	0.075
		(0.626)	(0.252)
$\text{ACTIVIST_ID_FIRM}_{\text{YEAR-3}}\text{_WITHOUT_CERTAIN_CHARACTERISTIC}_{\text{YEAR0}}$		0.145	0.133**
		(0.143)	(0.021)
$\text{ACTIVIST_ID_FIRM}_{\text{YEAR-4}}\text{_WITHOUT_CERTAIN_CHARACTERISTIC}_{\text{YEAR0}}$		0.230**	0.180*
		(0.042)	(0.070)
$\text{ACTIVIST_ID_FIRM}_{\text{YEAR-5_AND_EARLIER}}\text{_WITHOUT_CERTAIN_CHARACTERISTIC}_{\text{YEAR0}}$		0.037	0.252***
		(0.739)	(0.001)
NONACTIVIST_ID_FIRM		−0.008	−0.008
		(0.295)	(0.310)
No. of obs.	22,248	22,248	22,217
Adj. R^2	0.732	0.732	0.732

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firm-years in which the board currently has at least 1 Nonactivist ID appointed n years ago but no Activist IDs appointed n years ago, and 0 otherwise. We find that the coefficients on the variables indicating whether firms have at least 1 Activist ID appointed n years ago are positive and significant for all values of n, which suggests that the positive valuation impact of Activist ID appointments persists over time. However, none of the coefficients on $\text{NONACTIVIST_ID_FIRM}_{\text{YEAR-N}}$ are significant. These findings complement those of prior studies that document long-term value increases of target firms after activist shareholders' intervention (e.g., Bebchuk et al. (2015)).

In columns 2 and 3, to examine whether the types of Activist IDs studied in Table 3 also help improve long-term target value, we decompose $\text{ACTIVIST_ID_FIRM}_{\text{YEAR-N}}$ into 2 indicators according to whether Activist IDs have experience as executives of private U.S. firms and whether their nominating activists continue to hold equity in the target firm[8]: $\text{ACTIVIST_ID_FIRM}_{\text{YEAR-N_WITH_CERTAIN_CHARACTERISTIC}_{\text{YEAR0}}}$ and $\text{ACTIVIST_ID_FIRM}_{\text{YEAR_N_WITHOUT_CERTAIN_CHARACTERISTIC}_{\text{YEAR0}}}$. In these tests, we measure the characteristics of Activist IDs at the start of each year (i.e., Year_0) rather than at the time of appointment, as our objective is to investigate whether the long-term value impacts of Activist IDs shown in column 1 are driven by their current characteristics. In column 2, we find that the long-term value impact of Activist IDs accrues mostly to Activist IDs who have private firm executive experience. Thus, compared to Nonactivist IDs, Activist IDs' private firm experience allows them to add more short- and long-term value to firms by bringing diverse perspectives to the boardroom.

However, in column 3, we find that the long-term value impacts of Activist IDs are evident regardless of whether their nominating shareholders continue to hold

[8]We obtain information on activist shareholders' exit from the target firms by manually collecting data on activist shareholders' ownership from the Thomson 13F database, 13D filings, and proxy statements. We find that of 419 activists who nominated Activist IDs, 112 (26.73%) exit target firms by selling their entire equity stake by the end of our sample period, whereas 233 (55.61%) continue to hold some equity stakes in target firms. In 35 cases, target firms are sold or merged and in the remaining 39 cases, we are unable to collect the required information. The mean holding period for the former group of activists is 2.01 years, and 66.2% of the Activist IDs nominated by these activists continue to stay on the board even after the activists have exited the target firm. The mean holding period is approximately 3.13 years for the latter group of activists, and almost 76% of their Activist IDs continue to stay on the focal board at the end of the sample period. Only 4.01% of Activist IDs depart the focal board before their sponsoring shareholders' complete exit from the target firm. Thus, most Activist IDs continue to maintain ties to their nominating shareholders long after the initial appointment. As an alternative measure of Activist IDs' ties to nominating activists, we also focus on Activist IDs' employment history with the activists. At the time of appointment, approximately 16% of the Activist IDs are employees of the dissident shareholders who nominate them (Affiliated Activist IDs). By tracking their employment records reported in BoardEx, we find that about 85% of these Activist IDs continue to be employed by dissident shareholders by the end of our sample period. In untabulated tests, we reestimate column 3 of Table 3 by using an indicator that takes the value of 1 for firm-years in which the board has at least 1 newly appointed Affiliated Activist ID, and 0 otherwise, and an indicator that takes the value of 1 for firm-years in which the board has at least 1 newly appointed Activist ID and none of the Activist IDs are affiliated with their nominators, and 0 otherwise. We find that the coefficients on both indicators are positive and significant, while the difference between the 2 coefficients is statistically insignificant (p-value = 0.41). We also reestimate column 3 of Table 4 using Activist IDs' affiliation records and find that Activist IDs with and without affiliation contribute to increases in long-term value.

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equity in the target firm.[9] These results, together with those in column 3 of Table 3, suggest that although Activist IDs' contribution to short-term target value is contingent upon the presence of dissident shareholders, such presence has little impact on Activist ID's contribution to long-term target value. The results suggest that as newcomers of target boards, Activist IDs need strong support from their nominators in earlier appointment periods to make a difference, but as they gain recognition and voice on target boards over time, they can influence board decision-making without relying on such nominator support.

In untabulated tests, we also examine whether Activist IDs increase long-term firm value when they hold monitoring committee positions, which allow them to monitor various key strategic agendas and influence target management more directly. Consistent with our expectation, we find that the positive long-term value impacts of Activist IDs are more evident when they serve on monitoring committees.

C. Sources of Value Gain in Activist ID Appointments

In this subsection, we examine the types of firms and boards that are most likely to benefit from the appointments of Activist IDs, which helps uncover the potential channels through which Activist IDs create value for target firms.

In Panel A of Table 5, we use firm-level characteristics to identify circumstances under which firms benefit more from Activist ID appointments. We decompose ACTIVIST_ID_FIRM (NONACTIVIST_ID_FIRM) into 2 indicators according to the level of a firm's managerial agency problems, measured as its overinvestment, free cash flow problems, and lower dividend payout. To measure a firm's tendency toward overinvestment, we follow Biddle, Hilary, and Verdi (2009) and run a regression of the firm's total investment on firm sales growth within each industry and year, where total investments include capital expenditures, R&D, and acquisitions. Firms with a residual from the regression that is in the top 30 percentile in the CRSP-Compustat merged database are considered to be overinvestment firms. Firms with a free cash flow problem are those with free cash flow and Tobin's q values in the top 30 percentile and the bottom 30 percentile in the database, respectively. Firms with lower dividends are those whose dividend payout ratio is below or equal to the sample median. We expect Activist IDs to play a more important value-enhancing role in firms that have greater managerial agency problems (i.e., firms with higher overinvestment, firms with a higher free cash flow problem, and firms with lower dividends), and thus, these firms benefit more from the tactics that activist shareholders apply to improve firm performance (Brav et al. (2008), Denes, Karpoff, and McWilliams (2017)).

Consistent with our predictions, we find that the value-enhancing impact of Activist ID appointments is more evident among firms that overinvest, firms with a higher free cash flow problem, and firms with lower dividends. In contrast, the appointments of Nonactivist IDs to these firms are associated with insignificant value impacts, except in column 1, in which the appointments of Nonactivist IDs to overinvestment firms have a negative impact on firm value.

[9]In columns 2 and 3, the results do not change when we control for the proportion of directors who have executive experience in private U.S. firm and the presence of a dissident shareholder in a given year, respectively.

TABLE 5

Effect of Activist ID Appointments and Appointing Firm/Board Characteristics on Firm Value

Table 5 presents estimates of OLS regressions in which the dependent variable is the natural logarithm of Tobin's *q*. The sample consists of 22,248 firm-year observations in the BoardEx-Compustat-CRSP merged database from 2006 to 2015. Activist (Nonactivist) ID is an independent director nominated by a dissident shareholder (the incumbent board). ACTIVIST_ID_FIRM_WITH (WITHOUT)_CERTAIN_CHARACTERISTIC takes the value of 1 for firm-years in which the board has at least 1 newly appointed Activist ID and the firm has (does not have) the specified characteristic immediately prior to the appointment, and 0 otherwise. NONACTIVIST_ID_FIRM_WITH (WITHOUT)_CERTAIN_CHARACTERISTIC takes the value of 1 for firm-years in which the board has at least 1 newly appointed Nonactivist ID but no newly appointed Activist IDs and the firm has (does not have) the specified characteristic immediately prior to the appointment, and 0 otherwise. We consider a director to be newly appointed if the appointment occurred within the last 3 years. The omitted group in all regressions is firm-years in which the board has no newly appointed independent directors. All regressions include the control variables used in Table 3 and firm and year fixed effects. The Appendix provides detailed variable descriptions. *p*-values in parentheses are estimated using standard errors that adjust for firm clustering. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Comparison of Firm Value Between Activist ID Firms and Nonactivist ID Firms Based on Firm Characteristics

Independent Variable	Over-investment	High FCF and Low Tobin's *q*	Lower Dividend
	1	2	3
ACTIVIST_ID_FIRM_WITH_CERTAIN_CHARACTERISTIC: a	0.124**	0.289***	0.095***
	(0.027)	(0.000)	(0.001)
ACTIVIST_ID_FIRM_WITHOUT_CERTAIN_CHARACTERISTIC: b	0.051	0.055**	0.021
	(0.118)	(0.015)	(0.486)
NONACTIVIST_ID_FIRM_WITH_CERTAIN_CHARACTERISTIC: c	−0.049***	0.003	−0.008
	(0.001)	(0.883)	(0.429)
NONACTIVIST_ID_FIRM_WITHOUT_CERTAIN_CHARACTERISTIC: d	−0.000	−0.010	−0.009
	(0.989)	(0.231)	(0.320)
F-test for the difference between the coefficients (*p*-value):			
a = b	0.27	0.00***	0.06*
a = c	0.00***	0.00***	0.00***
c = d	0.00***	0.47	0.89
No. of obs.	17,264	20,464	21,141
Adj. R^2	0.731	0.733	0.729

Panel B. Comparison of Firm Value Between Activist ID Firms and Nonactivist ID Firms Based on Board Characteristics

Independent Variable	Long Tenured Board	Connected Board
	1	2
ACTIVIST_ID_FIRM_WITH_CERTAIN_CHARACTERISTIC: a	0.065**	0.070**
	(0.016)	(0.020)
ACTIVIST_ID_FIRM_WITHOUT_CERTAIN_CHARACTERISTIC: b	0.059	0.071**
	(0.152)	(0.020)
NONACTIVIST_ID_FIRM_WITH_CERTAIN_CHARACTERISTIC: c	−0.007	−0.015*
	(0.400)	(0.080)
NONACTIVIST_ID_FIRM_WITHOUT_CERTAIN_CHARACTERISTIC: d	−0.014	0.002
	(0.189)	(0.878)
F-test for the difference between the coefficients (*p*-value):		
a = b	0.90	0.97
a = c	0.01***	0.01***
c = d	0.55	0.20
No. of obs.	21,156	21,159
Adj. R^2	0.729	0.729

Next, we focus on the types of boards where Activist IDs are likely to have the most positive impacts. Activist IDs can add value by disrupting the dynamics of groupthink, which hampers the board's oversight role, and by bringing more independent views to the board (Coles et al. (2014), Bernile et al. (2018)). Thus, we expect that the appointments of Activist IDs are more beneficial for boards in which the proportion of entrenched board members (i.e., independent directors who serve on the board longer) is higher (Huang and Hilary (2018)) and those in which at least 1 independent director is connected to the CEO (Fracassi and Tate (2012), Engelberg, Gao, and Parsons (2013)).

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The results are reported in Panel B of Table 5. In column 1, we decompose ACTIVIST_ID_FIRM (NONACTIVIST_ID_FIRM) into 2 indicators according to whether the average tenure of independent directors on the board is above or equal to the sample median. Consistent with our prediction, we find that the value-enhancing role of Activist IDs is significant when the board consists of incumbent directors with longer tenure. In contrast, we do not find a significant value impact for the appointments of Nonactivist IDs to such boards, which indicates that the positive valuation impacts of director appointments to entrenched boards are specific to Activist IDs. In column 2, we decompose ACTIVIST_ID_FIRM (NONACTIVIST_ID_FIRM) into 2 indicators according to whether the board has at least 1 independent director who is socially connected to the CEO.[10] We find that Activist IDs' value-enhancing impacts are evident for both connected and nonconnected boards. In contrast, the appointments of Nonactivist IDs to connected boards have a significantly negative effect on firm value. The difference in valuation impacts is significant at the 1% level when firms with connected boards appoint Activist IDs compared to when firms with connected boards appoint Nonactivist IDs. Thus, connected boards benefit more from the appointments of Activist IDs, possibly due to Activist IDs' ability to bring more independent perspectives to the board compared to board-nominated directors, who tend to be more sympathetic toward management.

IV. Endogeneity Tests

Prior sections show that our results are unlikely to be driven by time-invariant firm characteristics since we control for firm fixed effects in the regressions. However, our results may be driven by other observable omitted firm characteristics or the general valuation effects that result from activist intervention events. We address these concerns by performing propensity score matching analyses and a test that distinguishes the valuation impact of Activist ID appointments from that of activist intervention not involving director appointments.

A. Propensity Score Matching Analysis

As a first test, we use a propensity score matching approach to mitigate the concern that omitted observable variables drive our results. We match each firm that appoints an Activist ID to a firm that appoints only directors nominated by the incumbent board. We include as matching covariates the firm characteristics in Table 3; other firm characteristics that prior literature considers important factors determining shareholder activism, including leverage, R&D intensity, capital expenditures, payout ratio, and an indicator that captures a firm's free cash flow problem (Brav et al. (2008), Denes et al. (2017))[11]; and year and industry fixed effects. We do not conduct matching within each year and industry

[10]The sample median proportion of independent directors who are socially connected to the CEO is 0.

[11]To ensure the efficiency of matching, we do not include the board-specific variables shown in Table 3.

TABLE 6

Effect of Activist ID Appointments on Firm Value: Using a Propensity Score Matching Approach

Table 6 examines the impact of appointing activist independent directors on firm value using a propensity score matching approach. The sample consists of 504 propensity score-matched firms in the BoardEx-Compustat-CRSP merged database from 2006 to 2015 (252 treatment firms that appointed an Activist ID and 252 control firms that appointed a Nonactivist ID but not Activist IDs). Activist (Nonactivist) ID is an independent director nominated by a dissident shareholder (the incumbent board). We use a one-to-one nearest neighbor propensity score matching approach with replacement, where the propensity score is estimated using a logit model. The variables used in the matching are those listed in Panel A, as well as industry (SIC 2-digit codes) and year fixed effects. Panel A presents the mean values of firm and board characteristics for treatment and control firms and *p*-values of *t*-tests for equality of means between the 2 groups of firms. Panel B reports the mean and median differences in Tobin's *q* changes from 1 year before ($Year_{t-1}$) up to 3 years after ($Year_{t+3}$) the director appointment year ($Year_t$) between the treatment and control firms. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Differences in Firm/Board Characteristics Between Treatment and Control Firms

Matching Variable	Treatment Firms (N = 252) 1	Control Firms (N = 252) 2	Test of Difference (p-value) 1−2
FIRM_SIZE	5.182	5.098	(0.626)
log(FIRM_AGE+1)	3.813	3.815	(0.755)
RETURN_VOLATILITY	0.028	0.028	(0.990)
ROA	0.059	0.074	(0.416)
INDUSTRY-ADJUSTED_RETURN	−0.136	−0.118	(0.639)
log(BOARD_SIZE)	2.061	2.030	(0.176)
PROPORTION_OF_INDEPENDENT_DIRECTORS	0.789	0.789	(0.927)
CEO-CHAIR_DUALITY	0.456	0.480	(0.593)
LONG-TERM_INDEPENDENT_INSTITUTIONAL_BLOCK_OWNERSHIP	0.167	0.171	(0.749)
BOOK_LEVERAGE	0.219	0.234	(0.463)
R&D_TO_ASSETS	0.055	0.045	(0.219)
CAPX_TO_ASSETS	0.052	0.054	(0.670)
PAYOUT_RATIO	0.036	0.032	(0.350)
HIGH_FCF_LOW_TOBIN'S_Q	0.075	0.091	(0.520)
DEPARTURE_OF_DIRECTORS	0.794	0.774	(0.589)

Panel B. Test of the Difference in Tobin's q Changes Between Treatment and Control Firms From $Year_{t-1}$ to $Year_{t+n}$

	$Year_{t+1} - Year_{t-1}$	$Year_{t+2} - Year_{t-1}$	$Year_{t+3} - Year_{t-1}$
Mean	0.104***	0.074*	0.055
Median	0.106***	0.070*	0.003

because there are insufficient numbers of potential control firms within each industry-year pair. We use a one-to-one nearest neighbor matching approach with replacement.

Panel A of Table 6 shows no significant differences in the mean values of the matching covariates between 252 treatment firms that appoint an Activist ID and 252 control firms that appoint a Nonactivist ID. In Panel B, we report the difference in the change in Tobin's q between the treatment and control firms. We measure the change in Tobin's q from $year_{t-1}$ to $year_{t+1}$ (up to $year_{t+3}$), where $year_t$ is the appointment year. We find that both the mean and median Tobin's q increase significantly more following Activist ID appointments than following appointments of board-nominated directors for windows up to 2 years after appointments. These results suggest that observable omitted firm characteristics, including those that are related to activism likelihood, are unlikely to explain the positive relation between Activist ID appointments and firm value increases.[12]

[12]In untabulated tests, we find that our main results shown in Tables 3 and 4 are robust to the inclusion of activism-related variables as additional controls.

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B. Incremental Valuation Effects of Activist ID Appointments Adjusting for Pure Activism Effect

In addition to seeking board representation, dissident shareholders engage in various other tactics, such as calls for special board meetings, tender offers, private negotiations with the target management/board of directors, and submission of shareholder proposals. To mitigate the concern that the valuation impact of Activist ID appointments simply captures the general valuation impact of these activist tactics, we conduct 2 tests that distinguish activist campaigns not involving dissident shareholders' director appointments (Pure Activism Event) from campaigns involving board appointments. First, we use a propensity score matching approach where we match each treatment firm that appoints an Activist ID to a control firm that experiences a Pure Activism Event. From the SharkWatch database, we initially identify 1,094 firms with a Pure Activism Event. After deleting observations with missing matching variables, we end up with a final sample of 867 control firms. Except for the indicator for independent director departure, we use the same matching variables as those used in Table 6; we exclude this variable because, by definition, a Pure Activism Event is less likely to be accompanied by the removal of board members.

Panel A of Table 7 shows that our matching identifies control firms that are similar to the treatment firms. In Panel B, we compute the difference in the change in Tobin's q from year_{t-1} to year_{t+1} (up to year_{t+3}) between the treatment and control firms, where year_t is the director appointment year for a treatment firm and the Pure Activism Event announcement year for a control firm. We find that for the windows up to year_{t+2}, firms appointing Activist IDs experience significantly larger increases in Tobin's q than control firms, which suggests that the positive valuation effect of Activist IDs is distinct from that of activist shareholders' intervention without board appointments.

To further examine the incremental valuation impact of Activist IDs beyond activist campaigns without board appointments, in Panel C of Table 7, we conduct multivariate regressions using the sample from Table 3. The dependent variable is Tobin's q, and the key independent variables are ACTIVIST_ID_FIRM and ACTIVIST_TARGET_FIRM_WITHOUT_DIRECTOR_APPOINTMENT, which takes the value of 1 for firms that experience an activist campaign that does not involve the appointments of directors nominated by a dissident shareholder within the last 3 years, and 0 otherwise. We find that the coefficient on ACTIVIST_ID_FIRM is positive and significant at the 1% level, while the coefficient on ACTIVIST_TARGET_FIRM_WITHOUT_DIRECTOR_APPOINTMENT is insignificant. The difference in coefficients between these 2 indicators is significant at the 1% level. Thus, the positive valuation impact of shareholder activism documented in the previous literature is particularly evident when activists seek board representation.

In untabulated tests, we compare the difference in long-term valuation impacts between Activist ID Firms and Activist Target Firms Without Director Appointments using the same regression specification as in column 1 of Table 4. We find that although both types of firms experience an increase in long-term value, the impact is much stronger for the former firms than for the latter firms: the magnitudes

TABLE 7

Incremental Effect of Activist ID Appointments on Firm Value After Adjusting for Pure Activism Valuation Effects

Table 7 examines the incremental impact of appointing activist independent directors on firm value after adjusting for the valuation effect of an activist campaign that does not involve the appointments of directors nominated by a dissident shareholder (Pure Activism Event). In Panels A and B, the sample consists of 498 propensity score-matched firms in the BoardEx-Compustat-CRSP merged database from 2006 to 2015 (249 treatment firms that appointed an Activist ID and 249 control firms that experienced a Pure Activism Event). Activist ID is an independent director who is nominated by a dissident shareholder. We use a one-to-one nearest neighbor propensity score matching approach with replacement, where the propensity score is estimated using a logit model. The variables used in the matching are those listed in Panel A as well as industry (SIC 2-digit codes) and year fixed effects. Panel A presents the mean values of firm and board characteristics for treatment and control firms and *p*-values of *t*-tests for equality of means between the 2 groups of firms. Panel B reports the mean and median differences in Tobin's *q* changes from 1 year before ($Year_{t-1}$) up to 3 years after ($Year_{t+3}$) the director appointment year ($Year_t$) between the treatment and control firms. Panel C presents estimates of OLS regressions in which we compare firm value between firms targeted by activism campaigns with and without director representation. The sample consists of 22,248 firm-year observations in the BoardEx-Compustat-CRSP merged database from 2006 to 2015. ACTIVIST_ID_FIRM takes the value of 1 for firm-years in which the board has at least 1 Activist ID appointed within the last 3 years, and 0 otherwise. ACTIVIST_TARGET_FIRM_WITHOUT_DIRECTOR_APPOINTMENT takes the value of 1 for firm-years in which the firm experiences an activist campaign that does not involve the appointments of directors nominated by a dissident shareholder within the last 3 years, and 0 otherwise. The regressions in Panel C include the control variables in Table 3 and firm and year fixed effects. The Appendix provides detailed variable descriptions. *p*-values in parentheses are estimated using standard errors that adjust for firm clustering. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Differences in Firm/Board Characteristics Between Treatment and Control Firms in a Propensity Score-Matched Sample

Matching Variable	Treatment Firms (N = 249) 1	Control Firms (N = 249) 2	Test of Difference (p-value) 1−2
FIRM_SIZE	5.201	5.033	(0.369)
log(FIRM_AGE+1)	3.813	3.803	(0.110)
RETURN_VOLATILITY	0.028	0.029	(0.601)
ROA	0.059	0.052	(0.710)
INDUSTRY-ADJUSTED_RETURN	−0.136	−0.165	(0.419)
log(BOARD_SIZE)	2.063	2.063	(0.999)
PROPORTION_OF_INDEPENDENT_DIRECTORS	0.789	0.793	(0.670)
CEO-CHAIR_DUALITY	0.454	0.494	(0.370)
LONG-TERM_INDEPENDENT_INSTITUTIONAL_BLOCK_OWNERSHIP	0.167	0.164	(0.822)
BOOK_LEVERAGE	0.220	0.226	(0.737)
R&D_TO_ASSETS	0.056	0.066	(0.310)
CAPX_TO_ASSETS	0.053	0.063	(0.112)
PAYOUT_RATIO	0.037	0.031	(0.310)
HIGH_FCF_LOW_TOBINS_Q	0.068	0.072	(0.861)

Panel B. Test of the Difference in Tobin's q Changes Between Treatment and Control Firms From $Year_{t-1}$ to $Year_{t+n}$

	$Year_{t+1} - Year_{t-1}$	$Year_{t+2} - Year_{t-1}$	$Year_{t+3} - Year_{t-1}$
Mean	0.088***	0.077*	0.015
Median	0.087***	0.052**	0.059

Panel C. OLS Regressions Comparing Firm Value Between Activist Target Firms With and Without Activist ID Appointments

Independent Variable	Dependent Variable: log (TOBIN'S_Q) 1
ACTIVIST_ID_FIRM: a	0.072***
	(0.001)
ACTIVIST_TARGET_FIRM_WITHOUT_DIRECTOR_APPOINTMENT: b	0.002
	(0.859)
F-test for the difference between the coefficients (*p*-value):	
a = b	0.00***
No. of obs.	22,248
Adj. R^2	0.731

of the coefficients on variables involving Activist ID Firm are all significantly greater than those of the coefficients on variables involving Activist Target Firms Without Director Appointments. These results complement those in prior literature by showing that the long-term valuation impact of activism events is stronger when

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activist shareholders send their representatives to the target board to actively safeguard their interests.

V. Director-Level Analysis

In this section, we examine whether shareholders assess Activist IDs and Nonactivist IDs differently by comparing the stock market reaction to these directors' appointments and their election voting outcomes. We also investigate whether Activist IDs are subsequently rewarded with more board seats than Nonactivist IDs.

A. Market Reactions to Director Appointment Announcements

To examine market reactions to director appointment announcements, we obtain announcement dates of director appointments from the Audit Analytics Director and Officer Changes database, which tracks 8-K filings of director appointments and departures. Following Fahlenbrach, Low, and Stulz (2017), we focus on the event window (−5, 1), where day 0 is the date the 8-K filing is accepted by the U.S. Securities and Exchange Commission (SEC).[13]

Panel A of Table 8 reports the univariate results for cumulative abnormal returns (CARs (−5, 1)). We find that both the mean and median CARs (−5, 1) for Activist ID appointments are positive and significantly larger than those for Nonactivist ID appointments.

In Panel B, we match each Activist ID to a Nonactivist ID using a one-to-one nearest neighbor propensity score matching approach with replacement. We use both firm- and director-level characteristics as matching covariates. We find that both the mean and median market reactions to the appointments of Activist IDs are significantly larger than those to the appointments of Nonactivist IDs.

Overall, these results suggest that the market's ex ante valuation is more positive for directors nominated by dissident shareholders than for those nominated by the incumbent board, further supporting the view that Activist IDs play a more value-enhancing role than Nonactivist IDs.

B. Shareholder Voting Outcomes

We next examine shareholder votes received by independent directors using their first uncontested voting outcomes. If Activist IDs are expected to perform well in the future, they should receive more favorable votes than other directors

[13]Firms in general need to file a Form 8-K within 4 business days of the event and to make their filings available on the Electronic Data Gathering, Analysis, and Retrieval (EDGAR) system; thus, the public has access to the 8-K report within, at most, 1 business day of the filing. Lerman and Livnat (2010) note that the requirements for filing 8-K forms ensure that the public can receive information about material events, including director appointments, within 5 business days of the event. Our event window, which starts 5 days before the filing date, ensures that we capture any market reactions to director appointments that might happen on day −4 and the effects of potential information leakage. In untabulated tests, we use other event windows, including (−1, 1), (−3, 3), and (−5, 5), as alternative windows. The univariate results using these alternative windows are similar to those for the cumulative abnormal return from 5 days before to 1 day after the filing date (CAR (−5, 1)). For the results using a propensity score-matched sample, only the results using CAR (−1, 1) are qualitatively similar to those using CAR (−5, 1).

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TABLE 8

Cumulative Abnormal Returns Around Director Appointment Announcement Dates: Director-Level Analysis

Table 8 presents the mean and median cumulative abnormal returns (CARs) around the independent director appointment announcement dates. The sample consists of 3,972 independent director appointments at firms in the BoardEx-Compustat-CRSP merged database from 2006 to 2015. We obtain appointment announcement dates from the Audit Analytics Director and Officer Changes database, and we use the date on which the 8-K filing is accepted by the SEC as the announcement date (Day 0). We calculate the abnormal return using the market model with a 220-trading-day estimation period beginning 280 days before and ending 61 days before the announcement date. We use the CRSP value-weighted index return as the market portfolio return. We sum the daily abnormal returns to compute the CAR from 5 days before the announcement date to 1 day after the announcement date (CAR (−5, 1)). We exclude director appointment events if there are other major confounding corporate events (e.g., announcements of mergers and acquisitions, quarterly earnings, dividend payments, and management guidance and 8-K filings of changes in other directors or officers) during the event window. Panel A shows the univariate results for the CARs around the independent director appointment announcement dates. In column 1, we use the full sample of independent director appointments. In columns 2 and 3, we divide independent directors by their nominators into 2 subgroups: Activist IDs (independent directors nominated by a dissident shareholder) and Nonactivist IDs (independent directors nominated by the incumbent board). Panel B shows the CARs around the independent director appointment announcement dates using a propensity score matching approach. We match each Activist ID to a Nonactivist ID. We use a one-to-one nearest neighbor propensity score matching approach with replacement, where the propensity score is estimated using a logit model. The matching covariates are FIRM_SIZE, INDUSTRY-ADJUSTED_RETURN, ROA, LONG-TERM_INDEPENDENT_INSTITUTIONAL_BLOCK_OWNERSHIP, DIRECTOR_WITH_RELATED_INDUSTRY_EXPERIENCE, DIRECTOR_WITH_FINANCE_EXPERIENCE, DIRECTOR_WITH_TECHNOLOGY_BACKGROUND, DIRECTOR_WITH_EXECUTIVE_EXPERIENCE, DIRECTOR'S_GENERAL_ABILITY_INDEX, log(DIRECTOR_AGE), log(NUMBER_OF_DIRECTORSHIPS + 1), and industry (Fama-French 10 industries) and year fixed effects. ***, **, and * in columns 1–3 of Panel A and columns 1 and 2 of Panel B indicate significance at the 1%, 5%, and 10% levels, respectively, for *t*-tests (Wilcoxon signed-rank tests) of whether the mean (median) CAR (−5, 1) is equal to 0. *p*-values of *t*-tests (Wilcoxon–Mann–Whitney tests) for the equality of mean (median) CARs (−5, 1) between the 2 different groups are reported in the last column of both panels.

Panel A. Univariate Tests of CARs (−5, 1)

	All Independent Directors	Activist IDs	Nonactivist IDs	Test of Difference (*p*-value)
	1	2	3	2−3
Sample size	3,972	84	3,888	
Mean	0.283**	2.426***	0.237**	0.007***
Median	−0.073	1.978	−0.096	0.021**

Panel B. Test of the Difference in CARs (−5, 1) Between Treatment and Control Director Appointments

	Activist IDs (Treatment Directors)	Nonactivist IDs (Control Directors)	Test of Difference (*p*-value)
	1	2	1−2
Sample size	84	84	
Mean	2.426***	−0.757	0.016**
Median	1.978	−0.611	0.073*

(Cai et al. (2009)). We match all independent directors to the ISS Voting Analytics database to obtain their voting outcomes. Our sample consists of voting outcomes for 13,898 directors. For each independent director, we calculate the excess percentage of "for" votes as the difference between each independent director's percentage of "for" votes and the average percentage of "for" votes for the board.

Panel A of Table 9 reports the univariate results. In column 1, we find that consistent with Cai et al. (2009), newly appointed independent directors receive, on average, higher shareholder support than other types of directors. When we classify the directors into Activist IDs (column 2) and Nonactivist IDs (column 3), we find that Activist IDs receive significantly higher shareholder support than Nonactivist IDs.

In Panel B, we use the same propensity score matching approach as that used in Panel B of Table 8, where we match each Activist ID to a Nonactivist ID based on firm and director characteristics. We continue to find that Activist IDs receive more favorable voting outcomes than their matched counterparts.

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TABLE 9

Shareholder Election Voting Outcomes for Directors by Nominators: Director-Level Analysis

Table 9 presents independent directors' first uncontested voting outcome. The sample consists of 13,898 independent directors who are appointed at firms in the BoardEx-Compustat-CRSP merged database from 2006 to 2015. EXCESS_PERCENT_FOR_VOTES is the difference between the independent director's percentage of "for" votes and the average percentage of "for" votes for the board at the shareholder meeting in a given year. Panel A shows the univariate results for EXCESS_PERCENT_FOR_VOTES. In column 1, we use the full sample of independent directors. In columns 2 and 3, we divide all independent directors by their nominators into 2 subgroups: Activist IDs (independent directors nominated by a dissident shareholder) and Nonactivist IDs (independent directors nominated by the incumbent board). Panel B shows the results using a propensity score matching approach. We match each Activist ID to a Nonactivist ID. We use a one-to-one nearest neighbor propensity score matching approach with replacement, where the propensity score is estimated using a logit model. The matching covariates are FIRM_SIZE, INDUSTRY-ADJUSTED_RETURN, ROA, LONG-TERM_INDEPENDENT_INSTITUTIONAL_BLOCK_OWNERSHIP, DIRECTOR_WITH_RELATED_INDUSTRY_EXPERIENCE, DIRECTOR_WITH_FINANCE_EXPERIENCE, DIRECTOR_WITH_TECHNOLOGY_BACKGROUND, DIRECTOR_WITH_EXECUTIVE_EXPERIENCE, DIRECTOR'S_GENERAL_ABILITY_INDEX, log(DIRECTOR_AGE), log(NUMBER_OF_DIRECTORSHIPS + 1), and industry (Fama-French 10 industries) and year fixed effects. ***, **, and * in columns 1–3 of Panel A and columns 1 and 2 of Panel B indicate significance at the 1%, 5%, and 10% levels, respectively, for *t*-tests (Wilcoxon signed-rank tests) of whether the mean (median) EXCESS_PERCENT_FOR_VOTE is equal to 0. *p*-values of *t*-tests (Wilcoxon–Mann–Whitney tests) for the equality of the mean (median) EXCESS_PERCENT_FOR_VOTE between the 2 different groups are reported in the last column of both panels.

Panel A. Univariate Test of Excess Percentage of "For" Votes

	All Independent Directors	Activist IDs	Nonactivist IDs	Test of Difference (*p*-value)
	1	2	3	2–3
Sample size	13,898	456	13,442	
Mean	1.362***	1.948***	1.342***	0.002***
Median	0.541***	0.772***	0.535***	0.041**

Panel B. Test of the Difference in Excess Percentage of "For" Votes Between Treatment and Control Director Appointments

	Activist IDs (Treatment Directors)	Nonactivist IDs (Control Directors)	Test of Difference (*p*-value)
	1	2	1–2
Sample size	404	404	
Mean	2.211***	1.333***	0.007***
Median	0.827***	0.355***	0.007***

C. Director Labor Market Outcomes

Prior literature shows that the labor market disciplines directors and rewards them for effective monitoring (e.g., Yermack (2004)). If the labor market is functioning well, Activist IDs' contribution to the value of the firms they currently serve should positively affect their future careers, resulting in additional future directorships in other firms. To test this prediction, we follow each appointed director for 3 years and examine whether Activist IDs track a different career path in the director labor market after their appointments to the focal firms compared to other directors. After excluding independent directors who serve on the focal board for less than 1 year and observations with missing values for control variables, our final sample consists of 8,930 firm-director appointment observations from 2006 to 2013.[14] We restrict the sample to directors who stay on the board for at least 1 year to ensure that the director labor market has time to observe a director's performance at the focal firm before deciding whether to reward her with additional appointments (Yermack (2004)).

The results are presented in Table 10. The dependent variable is the change in the number of independent directorships, including the focal firm directorship, that an independent director holds from $Year_t$ to $Year_{t+2}$, where $Year_t$ is the appointment

[14]We end the sample period in 2013 to ensure that we have a few years to observe the labor market outcomes of directors appointed in the later years of our sample period.

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TABLE 10

Director Labor Market Outcomes of Independent Directors: Director-Level Analysis

Table 10 presents estimates of OLS regressions in which the dependent variable, Δ_NUMBER_OF_INDEPENDENT_DIRECTORSHIPS, is the change in the number of independent directorships (including the directorship at the focal firm) that a director holds from $Year_t$ to $Year_{t+2}$, where $Year_t$ is the appointment year at the focal firm. The sample consists of 8,930 firm-director appointment observations in the BoardEx-Compustat-CRSP merged database from 2006 to 2013. We end the sample period in 2013 to ensure that we have a few years to observe the labor market outcomes of directors appointed in the later years of our sample period. We also exclude independent directors who depart the focal board within 1 year of their appointments. ACTIVIST_ID takes the value of 1 for an independent director nominated by a dissident shareholder, and 0 otherwise. Δ_TOBIN'S_Q is the change in Tobin's q from $Year_{t-1}$ to $Year_{t+1}$. Director-level characteristics include DIRECTOR_WITH_RELATED_INDUSTRY_EXPERIENCE, DIRECTOR_WITH_FINANCE_EXPERIENCE, DIRECTOR_WITH_TECHNOLOGY_BACKGROUND, DIRECTOR_WITH_EXECUTIVE_EXPERIENCE, DIRECTOR'S_GENERAL_ABILITY_INDEX, log(NUMBER_OF_DIRECTORSHIPS + 1), log(DIRECTOR_AGE), and FEMALE_DIRECTOR. The omitted group is Nonactivist IDs (independent directors nominated by the incumbent board). The Appendix provides detailed variable descriptions. *p*-values in parentheses are estimated using standard errors that adjust for firm clustering. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	Dependent Variable: Δ_NUMBER_OF_INDEPENDENT_DIRECTORSHIPS	
Independent Variable	1	2
ACTIVIST_ID: a	0.083	0.076
	(0.229)	(0.273)
Δ_TOBIN'S_Q: b	0.019***	0.018**
	(0.007)	(0.013)
a × b		0.095*
		(0.100)
Firm-level controls in Table 3	Yes	Yes
Director-level control variables	Yes	Yes
Industry fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
No. of obs.	8,930	8,930
Adj. R^2	0.055	0.055

year at the focal firm. In column 1, we use ACTIVIST_ID and the change in Tobin's q at the focal firm over $Year_{t-1}$ and $Year_{t+1}$ (Δ_TOBIN'S_Q) as our key independent variables. We find that the coefficient on Δ_TOBIN'S_Q is positive and significant, which suggests that the labor market rewards directors who have served on the boards of firms with performance improvements. However, the coefficient on ACTIVIST_ID is positive but insignificant, indicating that Activist IDs on average do not receive more directorships after their appointments to the focal firms. In column 2, we add the interaction term between ACTIVIST_ID and Δ_TOBIN'S_Q. We find that the coefficient on this interaction term is positive and significant at the 10% level. This result indicates that the career prospects of Activist IDs are more closely tied to improvements in appointing firm performance than the career prospects of other types of directors are. Thus, the labor market appears to view that any performance improvements in Activist ID Firms are directly attributable to Activist IDs.

Overall, these results suggest that the labor market rewards Activist IDs who are pivotal to applying positive changes in target firms and help increase shareholder value.

VI. Comparison of Activist Rookie IDs and Nonactivist Rookie IDs

In this section, we focus on independent directors with no prior boardroom experience (i.e., rookie directors), who have become an important source of director

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labor supply in the post-SOX period,[15] and we examine whether shareholder assessment and director labor market outcomes are different between rookie directors nominated by activist shareholders (i.e., Activist Rookie IDs) and those nominated by the incumbent board (i.e., Nonactivist Rookie IDs). We expect that general negative characteristics of rookie directors rendering them worse directors than seasoned directors due to the lack of boardroom experience are largely absent among Activist Rookie IDs who are supported by dissident shareholders. Furthermore, due to labor market constraints, activist shareholders must cast a wider net to source for directors from the unconventional director pool, particularly rookie directors.[16] Therefore, compared to seasoned independent directors, fresh-faced Activist Rookie IDs, as newcomers, are expected to bring broader perspectives to boardrooms, challenge the existing norms more effectively, and disrupt the old ways of doing things more aggressively.

To assess whether Activist Rookie IDs are different from Nonactivist Rookie IDs, we first identify rookie directors based on the starting year of each director's first directorship in firms covered by the BoardEx-Compustat-CRSP merged database. We consider rookie directors to be independent directors who have no prior directorship experience in firms in the merged database. After classifying rookie directors into 2 groups according to their nominators – Activist Rookie IDs and Nonactivist Rookie IDs – we repeat the director-level analyses in Tables 2 and 8–10 for these 2 types of rookie directors. Of the 20,194 director appointments, about 43% are rookie director appointments. Although Activist Rookie ID appointments account for a small fraction of all rookie independent director appointments (2.7%), we find that more than one-third of Activist IDs are Activist Rookie IDs when we focus only on Activist ID appointments.

In Panel A of Table 11, we compare the characteristics of Activist Rookie IDs and Nonactivist Rookie IDs. The results are generally similar to those reported in Table 2 in which we compare Activist IDs to Nonactivist IDs: compared to Nonactivist Rookie IDs, Activist Rookie IDs are less likely to have public U.S. firm experience, related industry experience, technology backgrounds, and social ties with the CEO but more likely to have private U.S. firm experience and degrees from Ivy League universities. They are also younger and more likely to be male. However, unlike the results in Table 2, we find that relative to Nonactivist Rookie IDs, Activist Rookie IDs have lower general managerial skills and are likely to have a similar level of finance experience.

In Panel B, we examine whether market reactions to director appointment announcements are different between the 2 types of directors using the same

[15]Due to a tight director labor market in the post-SOX period, the supply of qualified seasoned independent directors has dwindled (Linck et al. (2009)), and this shortage has been largely filled by first-time independent directors (Chen and Moers (2018)). The influx of these rookie independent directors has raised questions about their impact on board functioning because they lack authority in the boardroom and may be too inexperienced to be effective directors (Myers (2008), Bamford, Daum, and Vaidya (2013)).

[16]Because seasoned directors often shun small and risky firms, which are more likely to become the targets of activism campaigns, dissident shareholders, who are likely to face difficulties in identifying qualified seasoned directors from a conventional source of the director labor pool, should have strong incentives to search for and appoint the most qualified rookie directors from an unconventional pool.

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TABLE 11

Director-Level Analysis: Comparison Between Activist and Nonactivist Rookie IDs

Table 11 repeats the analyses in Tables 2 and 8–10 by comparing Activist Rookie IDs (independent directors nominated by a dissident shareholder who have no prior directorship experience at firms in the BoardEx-Compustat-CRSP merged database as of the director appointment date) and Nonactivist Rookie IDs (independent directors nominated by the incumbent board who have no prior directorship experience at firms in the BoardEx-Compustat-CRSP merged database as of the director appointment date). Panel A presents the summary characteristics for 236 Activist Rookie IDs and 8,349 Nonactivist Rookie IDs from 2006 to 2013. Panel B (C) compares the appointment announcement returns (shareholder election voting outcomes) of Activist Rookie IDs with those of Nonactivist Rookie IDs. The sample size differs across columns depending on the availability of the outcome variables. In columns 3 and 4 of Panel B (C), we match each Activist Rookie ID to a Nonactivist Rookie ID using a one-to-one nearest neighbor propensity score matching approach with replacement, where the propensity score is estimated using a logit model. The matching covariates used for the propensity score matching approach are the same as those in Tables 8 and 9. Panel D compares labor market outcomes between Activist Rookie IDs and Nonactivist Rookie IDs. The sample consists of 3,829 firm-rookie director appointment observations in the BoardEx-Compustat-CRSP merged database from 2006 to 2013. We exclude rookie directors who depart the focal board within 1 year of their appointments. The Appendix provides detailed variable descriptions. All test statistics are computed in the same ways as those in Tables 2 and 8–10. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Summary Characteristics (mean) of Rookie Independent Directors

	Activist Rookie IDs (N = 236)	Nonactivist Rookie IDs (N = 8,349)	Test of Difference (p-value)
	1	2	1−2
DIRECTOR_WITH_PUBLIC_US_FIRM_EXPERIENCE	0.178	0.305	0.00***
EXPERIENCE_AS_EXECUTIVE_OF_PUBLIC_US_FIRM	0.008	0.078	0.00***
DIRECTOR_WITH_PRIVATE_US_FIRM_EXPERIENCE	0.720	0.621	0.00***
EXPERIENCE_AS_EXECUTIVE_OF_PRIVATE_US_FIRM	0.441	0.266	0.00***
DIRECTOR'S_GENERAL_ABILITY_INDEX	−1.599	−1.307	0.00***
DIRECTOR_WITH_FINANCE_EXPERIENCE	0.360	0.315	0.14
DIRECTOR_WITH_RELATED_INDUSTRY_EXPERIENCE	0.131	0.204	0.01***
DIRECTOR_WITH_TECHNOLOGY_BACKGROUND	0.140	0.253	0.00***
DIRECTOR_WITH_SOCIAL_TIES_TO_CEO	0.020	0.067	0.01***
DIRECTOR_WITH_MBA_DEGREE	0.263	0.227	0.20
DIRECTOR_FROM_IVY_LEAGUE_SCHOOLS	0.301	0.205	0.00***
FEMALE_DIRECTOR	0.055	0.158	0.00***
DIRECTOR_AGE (years)	47.648	53.079	0.00***

Panel B. Test of the Difference in CARs (−5, 1) Between Activist and Nonactivist Rookie IDs

	Full Sample		Propensity Score-Matched Sample			
	Activist Rookie IDs	Nonactivist Rookie IDs	Activist Rookie IDs (Treatment Directors)	Nonactivist Rookie IDs (Control Directors)	Test of Difference (p-value)	
	1	2	3	4	1−2	3−4
Sample size	28	1,628	28	28		
Mean	3.380**	0.221	3.380**	−2.550*	0.029**	0.009***
Median	2.724*	−0.222	2.724*	−0.462	0.039**	0.033**

Panel C. Test of the Difference in Excess Percentage of "For" Votes Between Activist and Nonactivist Rookie IDs

	Full Sample		Propensity Score-Matched Sample			
	Activist Rookie IDs	Nonactivist Rookie IDs	Activist Rookie IDs (Treatment Directors)	Nonactivist Rookie IDs (Control Directors)	Test of Difference (p-value)	
	1	2	3	4	1−2	3−4
Sample size	144	5,593	131	131		
Mean	2.410***	1.375***	2.506***	0.968***	0.002***	0.003***
Median	0.944***	0.512***	1.099***	0.332***	0.106	0.023**

Panel D. OLS Regression Comparing Labor Market Outcomes Between Activist Rookie IDs and Nonactivist Rookie IDs

	Dependent Variable: Δ_NUMBER_OF_INDEPENDENT_DIRECTORSHIPS	
Independent Variable	1	2
ACTIVIST_ROOKIE_ID: a	0.153*	0.151*
	(0.053)	(0.053)
Δ_TOBIN'S_Q: b	0.005	0.004
	(0.477)	(0.583)
a × b		0.082
		(0.220)
Firm-level controls in Table 3	Yes	Yes
Director-level controls in Table 10	Yes	Yes
Industry fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
No. of obs.	3,829	3,829
Adj. R^2	0.042	0.042

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approaches as those in Panels A and B of Table 8. We find that firms appointing Activist Rookie IDs experience higher mean and median CARs (−1, 5) than those appointing Nonactivist Rookie IDs for both the full sample of rookie directors and the propensity score-matched sample.

In Panel C, we compare the voting outcomes of the 2 types of rookie directors during their first uncontested election. We find that Activist Rookie IDs receive significantly more favorable votes than Nonactivist Rookie IDs for both the full sample and the propensity score-matched sample.

In Panel D, we compare Activist Rookie IDs' labor market outcomes with those of Nonactivist Rookie IDs. In column 1, we find that Activist Rookie IDs have a better labor market outcome after their initial debut than Nonactivist Rookie IDs. However, the coefficient on the interaction term between ACTIVIST_ROOKIE_ID and Δ_TOBIN'S_Q in column 2 is positive but insignificant.[17]

Overall, the results in this section show that compared to Nonactivist Rookie IDs, Activist Rookie IDs' appointments are greeted more positively by the market, and they obtain more favorable shareholder votes and additional directorships in the future. This suggests that activist shareholders have the ability to identify capable first-time directors from the director labor market.

VII. Summary and Conclusion

In this study, we examine the role of independent directors who are nominated by dissident shareholders (Activist IDs). We find that activist shareholders hire a significant portion of their director candidates from private U.S. firms, which have not previously been considered a typical source of the director pool. Consistent with our predictions, we further find that compared to firms appointing directors nominated by the incumbent board (Nonactivist IDs), firms appointing Activist IDs experience a larger increase in firm value both in the short and long term. These results are more evident when Activist IDs can offer diverse views due to their private firm executive background. The results for a larger increase in firm value in the short term are also more pronounced when activist shareholders continue to hold equity in target firms, which helps Activist IDs have a more authoritative voice in the boardroom and obtain greater support for their actions. However, Activist IDs' long-term value impact is not contingent upon the presence of their nominators as target shareholders, possibly due to Activist IDs' growing influence on the board over time. We also find that the value-enhancing role of Activist IDs is particularly evident among firms that have higher agency problems and firms that have more entrenched boards. Additionally, we find that the positive impact of Activist IDs on

[17]In untabulated tests, we repeat the analyses in Table 11 using only seasoned independent directors. We find that similar to the findings in Table 11, shareholders generally view seasoned independent directors nominated by dissident shareholders (Activist Seasoned IDs) more favorably than those nominated by the incumbent board (Nonactivist Seasoned IDs) although their differences are not as stark as those between Activist Rookie IDs and Nonactivist Rookie IDs. The only difference is that Activist Seasoned IDs and Nonactivist Seasoned IDs are equally likely to be rewarded with future additional board seats, suggesting that the director labor market perceives seasoned independent directors homogenously irrespective of whom nominates them, possibly because these directors have been in the director labor market for some time.

target value is incremental to activism campaigns that do not involve Activist ID appointments.

Further supporting the view that Activist IDs add value to the firm, we find that compared to Nonactivist IDs, Activist IDs' appointments are greeted more positively by the stock market, and they receive more favorable votes at shareholder meetings. Activist IDs in firms with performance improvement also obtain more directorships in other firms following their first appointments.

Finally, we find that activist shareholders play an important role in discovering qualified first-time directors who go on to be highly sought-after directors in the director labor market. These rookie independent directors nominated by activist shareholders receive a more positive assessment from shareholders and the director labor market than rookie independent directors nominated by the incumbent board.

Appendix. Variable Definitions

This Appendix provides detailed descriptions of all variables used in the tables.

Key Independent Variables

ACTIVIST_ID: 1 for Activist IDs (independent directors who are nominated by a dissident shareholder), and 0 otherwise. Source: SharkWatch

ACTIVIST_ID_FIRM: 1 for firm-years in which the board has at least 1 Activist ID appointed within the last 3 years, and 0 otherwise. Source: SharkWatch

ACTIVIST_ID_FIRM$_{YEAR\text{-}N}$*:* 1 for firm-years in which the board currently has at least 1 Activist ID appointed *n* years ago, and 0 otherwise. Source: SharkWatch

ACTIVIST_ID_FIRM_WITH (WITHOUT)_DISSIDENT_SHAREHOLDER: 1 for firm-years in which the board has at least 1 Activist ID appointed within the last 3 years and her nominating dissident shareholder holds (does not hold) equity in the target firm at the beginning of the year, and 0 otherwise. Source: SharkWatch/Thomson 13F/DEF 14A, Schedule 13D filings

ACTIVIST_ID_FIRM$_{YEAR\text{-}N}$*_WITH (WITHOUT)_DISSIDENT_SHAREHOLDER*$_{YEAR0}$*:* 1 for firm-years in which the board currently has at least 1 Activist ID appointed *n* years ago and her nominating dissident shareholder holds (does not hold) equity in the target firm at the beginning of the year, and 0 otherwise. Source: SharkWatch/Thomson 13F/DEF 14A, Schedule 13D filings

ACTIVIST_ID_FIRM_WITH_PRIVATE_FIRM_EXPERIENCE: 1 for firm-years in which the board has at least 1 Activist ID appointed within the last 3 years who has worked as an executive of a private U.S. firm in the BoardEx database, and 0 otherwise. Source: SharkWatch/BoardEx

ACTIVIST_ID_FIRM$_{YEAR\text{-}N}$*_WITH_PRIVATE_FIRM_EXPERIENCE*$_{YEAR0}$*:* 1 for firm-years in which the board currently has at least 1 Activist ID appointed *n* years ago who has worked as an executive of a private U.S. firm in the BoardEx database, and 0 otherwise. Source: SharkWatch/BoardEx

ACTIVIST_ID_FIRM_WITHOUT_PRIVATE_FIRM_EXPERIENCE: 1 for firm-years in which the board has at least 1 Activist ID appointed within the last 3 years and

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none of the Activist IDs have worked as an executive of a private U.S. firm in the BoardEx database, and 0 otherwise. Source: SharkWatch/BoardEx

ACTIVIST_ID_FIRM$_{YEAR\text{-}N}$_WITHOUT_PRIVATE_FIRM_EXPERIENCE$_{YEAR0}$: 1 for firm-years in which the board currently has at least 1 Activist ID appointed *n* years ago and none of the Activist IDs have worked as an executive of a private U.S. firm in the BoardEx database, and 0 otherwise. Source: SharkWatch/BoardEx

ACTIVIST_ROOKIE_ID: 1 for Activist IDs who have no prior directorship experience at firms in the BoardEx-Compustat-CRSP merged database as of the director appointment date, and 0 otherwise. Source: SharkWatch/BoardEx

ACTIVIST_TARGET_FIRM_WITHOUT_DIRECTOR_APPOINTMENT: 1 for firm-years in which the firm experiences an activist campaign that does not involve the appointments of directors nominated by a dissident shareholder within the last 3 years, and 0 otherwise. Source: SharkWatch

NONACTIVIST_ID: 1 for Nonactivist IDs (independent directors who are nominated by the incumbent board), and 0 otherwise. Source: SharkWatch

NONACTIVIST_ID_FIRM: 1 for firm-years in which the board has at least 1 Nonactivist ID appointed within the last 3 years but no Activist IDs appointed within the last 3 years, and 0 otherwise. Source: SharkWatch/BoardEx

NONACTIVIST_ID_FIRM$_{YEAR\text{-}N}$: 1 for firm-years in which the board currently has at least 1 Nonactivist ID appointed *n* years ago but no Activist IDs appointed *n* years ago, and 0 otherwise. Source: SharkWatch/BoardEx

Firm Characteristics

BOOK_LEVERAGE: Sum of long-term debt and short-term debt scaled by total assets. Source: Compustat

CAPX_TO_ASSETS: Capital expenditures scaled by total assets. Source: Compustat

CAR_(−5, 1): Cumulative abnormal return from 5 days before to 1 day after the announcement of an independent director appointment. Source: CRSP

EXCESS_PERCENT_FOR_VOTES: Difference between the percentage of "for" votes for an independent director and the board's average percentage of "for" votes at shareholder meetings. Source: ISS Voting Analytics

FIRM_AGE: Number of years since a firm is covered for the first time by either CRSP or Compustat. Source: Compustat/CRSP

FIRM_SIZE: Logarithm of the market value of equity computed by multiplying the number of common shares outstanding by stock price at the fiscal-year end (Consumer Price Index adjusted at the 1983 price level). Source: Compustat

HIGH_FCF_LOW_TOBIN'S_Q: 1 if a firm's free cash flow is in the top 30 percentile in the CRSP-Compustat merged database (excluding finance and utility firms) and its Tobin's *q* is in the bottom 30 percentile in the same database, and 0 otherwise. Source: Compustat

INDUSTRY-ADJUSTED_RETURN: Cumulative daily stock return during the fiscal year minus value-weighted returns of other firms in the same Fama-French 48 industry. Source: CRSP

LOWER_DIVIDEND: 1 if a firm's dividend yield is below or equal to the sample median, and 0 otherwise. Dividend yield is computed as dividends for common and preferred stocks scaled by the sum of preferred stock redemption value and the market value of equity. Source: Compustat

OVER-INVESTMENT: 1 if a firm's residual from an investment model is in the top 30 percentile in the CRSP-Compustat merged database (excluding finance and utility firms), and 0 otherwise. The investment model is estimated for each industry-year (SIC 2-digit classification) with at least 20 observations using the following regression: $\text{TOTAL_INVESTMENT}_{i,t+1} = \beta_0 + \beta_1 \times \text{SALES_GROWTH}_{i,t} + \varepsilon_{i,t+1}$. TOTAL_INVESTMENT is the sum of R&D expenditure, capital expenditure, and acquisition expenditure less cash receipts from sale of property, plant, and equipment multiplied by 100 and scaled by lagged total assets (Biddle et al. (2009)). Source: Compustat

PAYOUT_RATIO: Sum of common stock dividends and purchases of common and preferred stock scaled by the market value of equity. Source: Compustat

R&D_TO_ASSETS: Max (0, R&D expenditures) / total assets. Source: Compustat

RETURN_VOLATILITY: Standard deviation of a firm's daily stock returns during the fiscal year. Source: CRSP

ROA: Operating income before depreciation scaled by lagged assets. Source: Compustat

TOBIN'S_Q: ((Total assets + market value of equity) − (common ordinary equity + deferred taxes))/total assets. Source: Compustat

Δ_NUMBER_OF_INDEPENDENT_DIRECTORSHIPS: Change in the number of total independent directorships (including the directorship at the focal firm) that an independent director holds from Year_t to Year_{t+2}, where Year_t is the year of appointment at the focal firm. Source: BoardEx

Δ_TOBIN'S_Q: Change in Tobin's q from Year_{t-1} to Year_{t+1}. Source: Compustat

Director Characteristics

DIRECTOR_AGE: Age of an independent director (in years). Source: BoardEx

DIRECTOR_EMPLOYED_BY_DISSIDENT: 1 if an Activist ID has been a nominating shareholder's employee during the past 3 years prior to her appointment, and 0 otherwise. Source: SharkWatch/BoardEx

DIRECTOR_FROM_IVY_LEAGUE_SCHOOLS: 1 if an independent director graduated from an Ivy League school (Brown University, Columbia University, Cornell University, Dartmouth College, Harvard University, Princeton University, University of Pennsylvania, and Yale University), and 0 otherwise (Custódio et al. (2013)). Source: BoardEx

DIRECTOR_NOMINATED_BY_HEDGE_FUNDS: 1 if an Activist ID is nominated by a hedge fund dissident shareholder, and 0 otherwise. Source: SharkWatch

DIRECTOR_WITH_FINANCE_EXPERIENCE: 1 if an independent director has i) a CPA license or a CFA designation, ii) financial management or accounting experience at firms in the BoardEx-Compustat-CRSP merged database (e.g., CFO, treasurer, controller, or other experience with a banking, finance, investment, or

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accounting title), iii) work experience at firms in the BoardEx-Compustat-CRSP universe of financial firms (SIC codes 6000–6999), or iv) work experience at investment firms (investment firm, private equity, specialty and other finance, bank, or insurance) in BoardEx, and 0 otherwise (Javakhadze, Ferris, and French (2016)). Source: BoardEx

DIRECTOR_WITH_MBA_DEGREE: 1 if an independent director holds an MBA degree, and 0 otherwise. Source: BoardEx

DIRECTOR_WITH_PUBLIC (PRIVATE)_US_FIRM_EXPERIENCE: 1 if an independent director has worked as an executive of a U.S. firm in the BoardEx-Compustat-CRSP merged database (private U.S. firm in the BoardEx), and 0 otherwise. Executive job title includes CEO, CFO, CIO, COO, president, VP, executive VP, senior VP, partner, managing director, treasurer, or inside director (Knyazeva, Knyazeva, and Masulis (2013)). Source: BoardEx

DIRECTOR_WITH_RELATED_INDUSTRY_EXPERIENCE: 1 if an independent director has worked as a manager at the division or company level (e.g., CEO, CFO, COO, chairman, president, division CEO, division CFO, division president, head of division, regional CEO, regional CFO, regional chairman, regional COO, or regional president) in the BoardEx-Compustat-CRSP universe of firms in the same industry (SIC 1-digit) as the focal firm, and 0 otherwise (Custódio and Metzger (2013)). Source: BoardEx

DIRECTOR_WITH_SOCIAL_TIES_TO_CEO: 1 if an independent director is socially connected to the CEO, and 0 otherwise. The independent director and the CEO are connected if i) they have worked together in the same firm (excluding common employment in the focal firm), ii) they graduated from the same university with the same degree within 1 year, or iii) they share membership in the same nonprofessional organization as directors or officers (Fracassi and Tate (2012), Engelberg et al. (2013)). Source: BoardEx

DIRECTOR_WITH_TECHNOLOGY_BACKGROUND: 1 if an independent director has worked for a firm that reports positive R&D expenditure or a high-tech firm (SIC codes 2833–2836, 3570–3577, 3600–3674, 7371–7379, or 8731–8734) as a manager at the division or company level, and 0 otherwise (Knyazeva et al. (2013)). Source: BoardEx

DIRECTOR'S_GENERAL_ABILITY_INDEX: The index is measured as the first factor from applying principal component analysis to 5 proxies for general managerial ability: executive experience (indicator), conglomerate experience (indicator), and the numbers of positions, firms, and industries in which the director has worked at firms in the BoardEx-Compustat-CRSP merged database (Custódio et al. (2013)). Source: BoardEx

EXPERIENCE_AS_EXECUTIVE_OF_PUBLIC (PRIVATE)_US_FIRM: 1 if an independent director currently works as an executive of a U.S. firm in the BoardEx-Compustat-CRSP merged database (private U.S. firm in BoardEx), and 0 otherwise. Source: BoardEx

FEMALE_DIRECTOR: 1 if an independent director is female, and 0 otherwise. Source: BoardEx

NUMBER_OF_DIRECTORSHIPS: Number of an independent director's other directorships at firms in the BoardEx-Compustat-CRSP merged database. Source: BoardEx

NOMINATING_DISSIDENT_SHAREHOLDER_OWNERSHIP: Proportion of common shares outstanding held by dissident shareholders at the activism announcement date. Source: SharkWatch

Board Characteristics

BOARD_SIZE: Number of directors on the board. Source: BoardEx

CONNECTED_BOARD: 1 if the board has at least 1 independent director who is socially connected to the CEO, and 0 otherwise. Source: BoardEx

DEPARTURE_OF_DIRECTORS: 1 if at least 1 independent director has departed the board within the last 3 years, and 0 otherwise. Source: BoardEx

LONG_TENURED_BOARD: 1 if the average tenure of independent directors on the board is above or equal to the sample median, and 0 otherwise. Source: BoardEx

PROPORTION_OF_BUSY_DIRECTORS: Ratio of the number of independent directors who hold at least 3 independent directorships, including the focal firm directorship, to the total number of independent directors on the board. Source: BoardEx

PROPORTION_OF_DIRECTORS_FROM_IVY_LEAGUE_SCHOOLS: Ratio of the number of independent directors from Ivy League schools to the total number of independent directors on the board. Source: BoardEx

PROPORTION_OF_DIRECTORS_WITH_EXECUTIVE_EXPERIENCE: Ratio of the number of independent directors who have worked as executives at firms in the BoardEx-Compustat-CRSP merged database to the total number of independent directors on the board. Source: BoardEx

PROPORTION_OF_DIRECTORS_WITH_FINANCE_EXPERIENCE: Ratio of the number of independent directors with finance experience to the total number of independent directors on the board. Source: BoardEx

PROPORTION_OF_DIRECTORS_WITH_HIGH_GENERAL_ABILITY_INDEX: Ratio of the number of independent directors whose general ability index is equal to or above the sample median in a given year to the total number of independent directors on the board. Source: BoardEx

PROPORTION_OF_DIRECTORS_WITH_MBA_DEGREE: Ratio of the number of independent directors with an MBA degree to the total number of independent directors on the board. Source: BoardEx

PROPORTION_OF_DIRECTORS_WITH_RELATED_INDUSTRY_EXPERIENCE: Ratio of the number of independent directors with related industry experience to the total number of independent directors on the board. Source: BoardEx

PROPORTION_OF_DIRECTORS_WITH_TECHNOLOGY_BACKGROUND: Ratio of the number of independent directors with a technology background to the total number of independent directors on the board. Source: BoardEx

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PROPORTION_OF_FEMALE_DIRECTORS: Ratio of the number of female independent directors to the total number of independent directors on the board. Source: BoardEx

PROPORTION_OF_INDEPENDENT_DIRECTORS: Ratio of the number of independent directors to the total number of directors on the board. Source: BoardEx

CEO/Other Governance Characteristics

CEO_AGE: CEO age (in years). Source: BoardEx

CEO_TENURE: Number of years a CEO has served as CEO. Source: BoardEx

CEO-CHAIR_DUALITY: 1 if a CEO serves as the chairperson of the board, and 0 otherwise. Source: BoardEx

LONG-TERM_INDEPENDENT_INSTITUTIONAL_BLOCK_OWNERSHIP: Proportion of common shares outstanding held by long-term independent institutional investors (i.e., investment companies, independent investment advisors, public pension funds, corporate private pension funds, and university and foundation endowments that are either dedicated or quasi-indexer investors) that own more than 5% of a firm's equity (Bushee and Noe (2000), Chen, Harford, and Li (2007)). Source: Thomson 13F

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