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The Determinants of Board and Sub-Committee Meetings: The Case of Real Estate Investment Trusts (REITs)

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This study examines how board structure, director characteristics, and firm fundamentals jointly influence the frequency of meetings of real estate investment trust (REITs) boards from 2010 to 2022. We find that board activity is largely reactive to firm conditions rather than a proactive governance mechanism. Across the full sample, the boards meet more frequently following a weaker performance, higher leverage, and greater uncertainty, which is consistent with meetings that serve as monitoring responses to emerging risks. We further document that firms with weaker growth prospects shift board attention toward monitoring, while firms with stronger growth opportunities engage boards more in advisory and strategic deliberations. In addition, there is substantial heterogeneity across institutional environments. In large, highly visible S&P 500 REITs, board size and independence are associated with greater engagement across monitoring and advisory functions, thus suggesting that governance structures operate more effectively under strong market scrutiny and transparent information environments. In contrast, smaller non-S&P 500 REITs exhibit more episodic governance patterns in which meeting activity responds broadly to performance shocks and financial risk, and where structural governance attributes do not consistently translate into board engagement. Additional analyses show that board meetings respond to prior firm conditions but do not predict future operating performance, thus indicating that meeting frequency signals governance response rather than governance effectiveness.

Keywords
Board of Directors, Board Committees, REITs, Board Meetings

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1. Introduction

The aim of this paper is to investigate the relationship between real estate investment trust (REIT) board characteristics and the frequency of board and sub-committee meetings as a proxy for REIT board effectiveness. Understanding how REIT boards execute their fiduciary responsibilities is crucial for evaluating their effectiveness.

It has been established in the literature that effective board governance is not only captured by board structure, but also board processes (Pugliese et al., 2009; Schwartz-Ziv and Weisbach, 2013; Lin et al., 2014; Judge and Talaulicar, 2017), particularly board meetings. Board meetings are the primary venue where directors exercise both their monitoring and advisory responsibilities. Evidence from board meeting minutes shows that most of the board time is devoted to supervisory issues, including oversight of management decisions, evaluation of performance, and strategic deliberation (Schwartz-Ziv and Weisbach, 2013). In addition, related studies document that board meeting attendance and meeting activity are directly linked to supervisory quality and firm performance (Ntim and Osei, 2011; Lin et al., 2014).

Although it would be ideal to analyze how a corporate board carries out its fiduciary duties by analyzing board meeting minutes, these minutes are hard to come by (Schwartz-Ziv and Weisbach, 2013). As an alternative, we use the frequency of board and sub-committee meetings as a proxy to explore board activities and decision-making processes as it has been established that board meeting frequency is determined by firm circumstances rather than being a mechanical governance feature. For example, boards meet more frequently following poor performance (Vafeas, 1999; Haque et al., 2025), and when financial reporting quality is low (Vafeas and Vlittis, 2024), firms experience corporate events such as restatements or acquisitions (Brick and Chidambaran, 2010), and ownership and monitoring structures change (Greco, 2011; Al-Najjar, 2012). In addition, the association between board meeting frequencies and corporate performance is not monotonic (Ntim and Osei, 2011). This body of work suggests that board meeting frequency can capture how boards adjust their monitoring and advisory roles in response to information uncertainty, performance pressure, and evolving governance demands.

Given the unique regulatory requirements and operational constraints that govern REITs, we extend this stream of literature by examining the determinants of REIT board meeting frequency and comparing them with the determinants documented for non-REIT firms in previous research. In addition, since it is reasonable to assume that important board decisions are very likely to be discussed and deliberated at various sub-committees before general board discussions, in addition to analyzing the determinants of overall board meetings, we analyze oversight/monitoring committee meetings and strategic/advisory committee meetings separately because these two types of board committees

serve very different functions (Adams, 2003; Adams et al., 2021; Chen and Wu, 2016). We conjecture that mandatory dividend payouts,[1] asset composition tests,[2] income source restrictions,[3] limitations to takeover discipline due to the IRS "five or fewer" rule[4] combined with most self-imposed ownership limits[5] of REITs may cause the determinants of board meeting frequency in REITs to differ from those observed in other industries. REIT industry specific features can potentially constrain internal financing flexibility, thus leading to increased reliance on external capital markets, and subsequently elevating the importance of board monitoring and advisory roles in asset valuation, acquisition, financing, and associated regulatory compliance (Feng at al., 2005; Hartzell et al., 2008; Campbell et al., 2011). We focus on U.S. equity REIT boards. The financial reporting environment for U.S. REITs is often regarded as relatively transparent, largely due to regulatory requirements and the unique nature of REITs as pass-through entities. REITs are obligated to distribute at least 90% of their taxable income to shareholders, which necessitates detailed and frequent disclosures to maintain investor trust and comply with regulatory standards (Bianco et al., 2007; Bauer et al., 2010). This transparency is believed to limit opportunities for managerial misconduct, as stakeholders can more readily scrutinize financial performance and hold managers accountable. However, the evidence on the effectiveness of REIT corporate governance on REIT performance and the reliability of financial reporting quality is mixed, and that corporate governance is only weakly related to REIT performance conditioned upon exceptional circumstances (Feng et al., 2005; Ambrose and Linneman, 2001; Hartzell et al., 2006; Bianco et al., 2007; and Bauer et al., 2010). In addition, it has been noted that corporate governance mechanisms can be weakened due to the unique legal and regulatory structure of REITs (Ghosh and Sirmans, 2003, Eichholtz and Kok, 2008; and Cannon et al., 2006). Therefore, sound corporate governance still plays an important role in constraining management opportunistic behaviors (Anglin et al., 2013; Deng et al., 2017). By mitigating the principal-agent problem between managers and stakeholders, sound corporate governance can also help to improve REIT performance (e.g., Capozza and Seguin (2003); Han, (2006); Hartzell et al. (2008); Anglin et al. (2011); and Chong et al. (2017)). This highlights the need for a nuanced understanding of how governance mechanisms interact with the unique attributes of the REIT sector.

We begin by analyzing a full sample of REITs from 2010 to 2022. We find that board meeting frequency responds systematically to firm performance, financial risk, growth opportunities, and the information environment. Across the full sample, boards meet more frequently following deteriorating

[1] https://www.sec.gov/files/reits.pdf
[2] Internal Revenue Code, 26 U.S.C. § 856(c)(4)(A)-(D) and Treas. Reg. § 1.856-2 and § 1.856-3
[3] Internal Revenue Code, 26 U.S.C. § 856(c)(3) and Treas. Reg. § 1.856-2(c)
[4] Internal Revenue Code, 26 U.S.C. § 856(a)(6) and § 856(h)
[5] https://www.jdsupra.com/legalnews/shareholder-activism-in-the-public-reit-5420945/

performance, higher leverage, and greater uncertainty. We also document that the frequency of meetings varies with firm fundamentals: while the board of low growth firms focuses on monitoring activities, the board of high growth firms focuses more on advisory and strategic engagement. External information production, proxied by analyst coverage, is generally associated with fewer meetings, which is consistent with the monitoring substitution effect.

We also find substantial heterogeneity across institutional environments. In large, S&P 500 REITs, board size and independence are associated with greater engagement across monitoring and advisory meetings, thus suggesting that governance structures operate more effectively under strong market scrutiny and information transparency. In contrast, smaller non-S&P 500 REITs exhibit more reactive governance patterns in which meeting activity responds more broadly to performance and financial risk, and where board independence and size do not consistently translate into greater engagement.

Additional analyses confirm that overall, board meetings are largely reactive to prior firm conditions and risk, and do not predict future firm performance. Taken together, the findings suggest that board meeting frequency captures adaptive governance responses shaped by institutional visibility and information environments rather than representing a forward-looking measure of governance effectiveness. This inquiry has important implications for different stakeholders. For investors, board meeting frequency serves as a visible signal of board engagement and governance responsiveness in an industry where asset valuation and leverage decisions are critical to firm value. For regulators and policymakers, understanding the drivers of board activity in REITs informs ongoing discussions about governance effectiveness in industries where market discipline is structurally weakened. For firms, the findings highlight how board processes adjust to strategic, financial, and informational demands, thus offering guidance on how governance activity should be structured in asset-intensive and regulated organizations.

The remainder of the paper is organized as follows. Section 2 discusses the related literature and provides the hypotheses. Section 3 discusses the variable measurement and empirical models. Section 4 provides the empirical results and additional sensitivity analyses. Section 5 concludes.

2. REIT Board Effectiveness

The ideal approach to analyze how a corporate board carries out its fiduciary duties is by analyzing the board meeting minutes. These minutes contain intricate information about board resolutions, deliberations, and measures enacted during board sessions. Furthermore, they offer historical context and a reference point for the advancement of the organization, as well as the recording of dissenting viewpoints or objections to specific decisions. However, a large

sample of board meeting minutes is hard to obtain. For example, in a rare case, Schwartz-Ziv and Weisbach (2013) are able to collect board meeting minutes with special arrangements, but the sample size is only 11 firms.

Researchers have tried an alternative route by investigating board sub-committee meeting frequencies as it is reasonable to expect that important board decisions are very likely to be discussed and deliberated at various sub-committees before general board discussions. However, the empirical results are very scarce and inconclusive. Some suggest that granting formal authority to sub-committees can impair communication and decision-making (Adams et al., 2021; Chen and Wu, 2016). Using a sample in the United Kingdom (UK) between 2003 and 2009, Al-Najjar (2012) documents a positive relationship between board size and overall meeting frequency, while firm characteristics can also influence meeting frequency. In a study in the United States (U.S.), Lee (2020) finds that independent directors who have lengthy tenures and hold positions on multiple boards are inclined to engage in multitasking and serve on numerous committees. Firms that encourage multitasking among their independent directors tend to exhibit lower CEO compensation and higher return on assets. In addition, the advantages of having multitasking independent directors are especially pronounced in companies led by long-tenured CEOs.

REITs provide a distinctive and economically important setting to investigate board meeting activity. The evidence on the effectiveness of REIT corporate governance on REIT performance so far has been mixed.

On the one hand, the constant need for fair value considerations, property-level cash flow monitoring, and frequent acquisition and disposition activities are all unique features for REITs (Ghosh and Sirmans, 2003; Han, 2006; Morri et al., 2023), which need sound corporate governance in constraining management opportunistic behaviors (Anglin et al., 2013; Deng et al., 2017) and help to improve REIT performance and enhance REIT value (e.g., Capozza and Seguin (2003); Han (2006); Hartzell et al. (2008); Anglin et al. (2011); Chong et al. (2017)). Particularly, in the absence of external governance mechanisms, such as hostile takeovers, internal governance mechanisms are more critical in REITs (Campbell et al., 2011). There is evidence that REIT boards are typically larger, more independent, and more specialized in real estate expertise than boards of non-REIT firms, thereby reflecting the need for enhanced monitoring of asset management, valuation, and regulatory compliance (Hartzell et al., 2008; Anglin et al., 2013).

On the other hand, REIT payout constraints can reduce managerial discretion over free cash flow, which can potentially reduce the need for board monitoring. Furthermore, REIT regulatory structure and required payout rules can potentially dampen the extent of board governance effectiveness (Ghosh and Sirmans 2003, Eichholtz and Kok, 2008; and Cannon et al., 2006) which leads to persistent performance differentials (Ambrose and Linneman, 2001). Overall,

the link between strong corporate governance and firm performance and value may be weaker in the REIT industry than other industries (Bauer et al., 2010). It has been shown that REIT board structure and performance are often size dependent and conditioned upon the overall effectiveness of internal governance (Feng et al., 2005). In addition, the effectiveness of board governance is also stage dependent. It seems that at the stage of a REIT initial public offering (IPO; Hartzell et al., 2006) and when REITs face stronger external governance pressure (Bianco et al., 2007), the effectiveness of corporate governance is most pronounced. This underscores the need for a more nuanced understanding of how governance mechanisms operate within the unique institutional setting of REITs. One approach is to examine the determinants of overall board meeting frequency and compare them with the meeting frequency of key subcommittees, such as monitoring and advisory committees.

Whether REIT boards are more likely to exert a prominent role in monitoring or advisory function, or both, remains an empirical question. With weakened discipline of the external capital market such as hostile takeovers, the monitoring and advisory role of REIT boards can be particularly important especially due to the asset-intensive investment choices, leverage policy, and external financing dependence of REITs (Bauer et al., 2008). It is likely that these features will render board processes, such as the frequency of board and board committee meetings, more important for REITs, particularly those related to investment and financing decisions (Noguera, 2023; 2024). The heightened reliance on external capital markets caused by strict assets, income, and ownership tests can potentially increase the need of expertise from REIT boards on financing, investment, and compliance areas (Bauer et al., 2010; Hartzell et al., 2008; Ghosh and Sirmans, 2005). Frequent meetings may be required to oversee property acquisitions, financing decisions, dividend policy compliance, and asset performance across geographically dispersed portfolios (Doan and Nguyen, 2018; Anglin et al., 2013). Previous studies in the literature also provide evidence that REIT boards often rely heavily on specialized committees, such as investment, audit, and compensation committees, which may substitute for full board meetings and concentrate monitoring and advisory functions at the committee level (Noguera, 2023; 2024). In general, board meetings are influenced by two distinct categories of factors. The first category comprises governance factors, both internal and external. Internal governance factors refer to factors such as board size, tenure of board members, the presence of independent board members, and presence of CEO duality. Institutional investors can also be viewed as an external governance factor. The second category encompasses firm-specific factors, which include considerations like firm profitability, size, leverage, growth opportunities, and firm age. The unique characteristics of REITs may require different board engagement for total and sub-committee meetings, yet existing theories provide limited guidance on how board composition and firm characteristics should influence the activity levels of different board committees. Therefore, rather than imposing directional hypotheses derived from non-REIT settings, we adopt an exploratory approach

to examine how REIT boards allocate monitoring and advisory effort through committee meeting frequency. This approach allows us to document how governance, including both overall committee meetings and advisory and monitoring sub-committee meetings function in this distinct institutional environment. Our exploratory inquiries are as follows:

Inquiry 1. *How does the REIT board composition affect the meeting frequency of the monitoring committees?*
Inquiry 2. *How does the REIT board composition affect the meeting frequency of the advisory committees?*
Inquiry 3. *How does the REIT board composition affect the meeting frequency of the monitoring and advisory committees?*

3. Research Design

We obtained board data and accounting information for the REITs from Bloomberg for the period of 2010 to 2022. During the sample period, there are 31 S&P 500 REITs and 34 non-S&P 500 REITs. Our data set covers the complete set of REITs included those in the S&P 500 during the sample period. To create a meaningful comparison group, we then select a random sample of non–S&P 500 REITs. Our goal is to construct two groups that differ primarily in market visibility and external monitoring intensity while remaining comparable in sample size.[6]

We consider audit, compensation, and nominating committees as monitoring or oversight committees which are mandatory committees post the Sarbanes-Oxley Act (Lee, 2020), and finance and investment committees as strategic or advisory committees which provide guidance on financial matters and investment strategies but are not mandatory (Lee, 2020).

3.1 Determinants of Board and Committee Meetings – Empirical Model

To test how board and firm characteristics are associated with various types of board meetings, we use the following regression model:

[6] The dataset relies on hand-collected, year-by-year board members data from proxy filings, which is highly labor intensive. Given this constraint, we believe that selecting a random non–S&P 500 sample of an equal size is a reasonable and methodologically sound approach that preserves internal validity.

$$
\begin{aligned}
Ln(Meetings_{j,t}) = {} & \beta_0 + \beta_1 ROA_{i,t} + \beta_2 Lag(ROA)_{i,t} \\
& + \beta_3 Leverage_{i,t} + \beta_4 Board\ Size_{i,t} \\
& + \beta_5 Director\ Tenure_{j,t} + \beta_6 Busyness_{j,t} \\
& + \beta_7 Outsiders_{j,t} + \beta_8 CEO\ Chair_{i,t} \\
& + \beta_9 Firm\ Age_{i,t} + \beta_{10} Analyst\ Reports_{i,t} \\
& + \beta_{11} Size_{i,t} + \beta_{12} B/M_{i,t} + \beta_w \upsilon_t + \varepsilon_{i,t}
\end{aligned} \tag{1}
$$

Meetings include *Total Meetings*, *Monitoring Meetings*, or *Advisory Meetings* attended by each board member *j* in year *t. Total Meetings* are the sum of all monitoring and advisory committee meetings each year. *Monitoring Meetings* are the sum of all monitoring committee meetings each year. *Advisory Meetings* are the sum of all advisory committee meetings each year. To mitigate potential skewness in these raw count frequencies, we take the natural logarithm of all meeting count variables. To further account for 0 meetings, we operationalize this procedure by taking the natural logarithm of (1 + *Meetings*) to get *Ln*(*Total Meetings*), *Ln*(*Monitoring Meetings*), and *Ln*(*Advisory Meetings*) respectively. This transformation reduces skewness inherent in count data and makes the variables more suitable for ordinary least square (OLS) estimations.

For board characteristics, there are three measures that are board specific, namely *Board Size*, *Outsiders*, and *CEO Chair*. *Board Size* is the number of board members for each REIT each year. *Outsiders* is the ratio of outside directors on the board. *CEO Chair* is a dummy variable that equals 1 if the CEO chairs the board, and 0 otherwise. In addition to board specific measures, there are director specific measures including *Director Tenure* and *Busyness*, *Director Tenure* is the total number of years aboard that a director has served on the board. *Busyness* is the number of additional directorships of a director. Firm characteristic measures include return on assets (*ROA)*, *Lag* (*ROA*),[7] *Leverage*, *Firm Age*, *Size*, and *B/M*. *ROA* are funds from operations divided by total assets each year. *Lag* (*ROA*) is the one-year lag of *ROA*. *Leverage* is the debt ratio (total debt/total assets) each year. *Firm Age* is the number of years since the IPO of the firm. *Size* is the natural log of total assets. *B/M* is the book value of equity divided by the market value of equity. In addition, we also include an institutional monitoring measure, *Analyst Reports*, which is the number of analyst recommendations for a REIT each year. The fixed-year effects are included in the estimation. Standard errors are clustered by directors or firms.

[7] We deem that the *ROA* of REITs can be very sensitive to the asset denominator if REITs frequently undergo acquisitions, dispositions, and fair-value adjustments to property portfolios. Under these circumstances, the asset base can change substantially from one year to the next. As a result, contemporaneous and lagged *ROA* can be very different even if the numerator remains consistent. Most importantly, previous research shows that board meeting activity responds to previous firm conditions rather than contemporaneous outcomes (Vafeas, 1999; Haque et al., 2025).

3.2 Summary Statistics

The summary statistics are reported in Table 1. Panel A reports the total number of board meetings for all REITs. The mean (median) of total board meetings conducted is 17.856 (17), monitoring meetings are 15.891 (16) and advisory meetings are 1.965 (0). While the median number of *Total Meetings* is 17, the upper tail extends to 28 at the 95th percentile. The skewness is even more pronounced for *Advisory Meetings*, where the median is 0 but the upper tail reaches 9 at the 95th percentile. This distributional pattern violates the approximate normality assumptions that underlie OLS estimation and justify the use of log transformation for all the meeting variables in our analyses.

REITs operate in an institutional setting where external governance mechanisms, such as the market for corporate control, are relatively weak. This makes alternative forms of external monitoring particularly relevant. We argue that inclusion in the S&P 500 materially increases firm visibility to institutional investors, index funds, analysts, media coverage, and other market participants. This heightened visibility can potentially subject firms to greater scrutiny and reputational discipline, which can function as an informal yet effective external monitoring mechanism. Therefore, we further separate our sample into S&P 500 REITs (Panel B of Table 1) and non-S&P 500 REITs (Panel C of Table 1). In comparing board meetings between the S&P 500 REITs (Panel B of Table 1) and non-S&P 500 REITs (Panel C of Table 1), the former on average conduct more board, monitoring, and advisory meetings. This is consistent with the hypothesis that S&P REITs are subject to more market scrutiny.

The correlation matrices are reported in Table 2. As expected, there is a high correlation between *ROA* and *Lag*(*ROA*). There are also high and statistically significant correlations between *CEO Chair* and firm *Size*, *Analyst Reports* and firm *Size*, and *Average Tenure* of directors and all types of meetings. However, after testing multicollinearity by using variance inflation factors, no evidence of multicollinearity is found.

4. Empirical Results

4.1 All REITs

Table 3 reports the regression analyses on all of the REITs, S&P REITs and non-S&P REITs by using data clustered by director.

Table 1 Summary Statistics

Panel A All REITs (2010-2022)

Variable	N	Mean	Std. Dev.	5%	25%	Median	75%	95%
Total Meetings	7,125	17.856	5.770	8.000	14.000	17.000	22.000	28.000
Monitoring Meetings	7,125	15.891	4.394	8.000	13.000	16.000	18.000	23.000
Advisory Meetings	7,125	1.965	3.227	0.000	0.000	0.000	4.000	9.000
ROA	7,125	0.064	0.050	0.028	0.045	0.057	0.069	0.114
Lag(*ROA*)	6,313	0.029	0.035	-0.016	0.013	0.028	0.043	0.076
Leverage	6,331	0.501	0.157	0.275	0.403	0.486	0.592	0.739
Board Size	7,125	9.375	1.727	7.000	8.000	9.000	11.000	12.000
Avg. Tenure	7,125	10.657	3.829	5.750	8.077	10.000	12.333	17.700
Busyness	7,118	1.030	1.162	0.000	0.000	1.000	2.000	3.000
Outsiders	7,125	0.664	0.171	0.333	0.571	0.700	0.778	0.900
CEO Chair	7,125	0.270	0.444	0.000	0.000	0.000	1.000	1.000
Firm Age	6,911	25.932	10.634	14.000	19.000	23.000	29.000	51.000
Analyst Reports	7,125	15.221	6.278	4.000	11.000	15.000	20.000	25.000
Size	6,313	8.716	1.287	6.470	7.894	8.788	9.636	10.717
B/M	6,313	0.563	2.324	0.106	0.302	0.451	0.607	0.931

Notes: All variable definitions are summarized in Appendix I.

Panel B S&P 500 REITs (2010-2022)

Variable	N	Mean	Std. Dev.	5%	25%	Median	75%	95%
Total Meetings	3,883	19.051	5.230	11.000	16.000	18.000	22.000	28.000
Monitoring Meetings	3,883	16.819	3.925	11.000	15.000	16.000	19.000	23.000
Advisory Meetings	3,883	2.232	3.441	0.000	0.000	0.000	4.000	9.000
ROA	3,883	0.063	0.028	0.034	0.047	0.058	0.069	0.125
Lag(ROA)	3,433	0.032	0.038	-0.011	0.016	0.029	0.043	0.088
Leverage	3,441	0.503	0.169	0.298	0.398	0.478	0.603	0.787
Board Size	3,883	9.974	1.779	7.000	9.000	10.000	11.000	13.000
Avg. Tenure	3,883	10.227	3.315	5.917	8.000	9.667	11.889	16.200
Busyness	3,882	1.087	1.122	0.000	0.000	1.000	2.000	3.000
Outsiders	3,883	0.700	0.168	0.375	0.636	0.727	0.818	0.909
CEO Chair	3,883	0.400	0.490	0.000	0.000	0.000	1.000	1.000
Firm Age	3,883	24.720	9.726	13.000	18.000	23.000	28.000	47.000
Analyst Reports	3,883	18.923	4.722	10.000	16.000	20.000	22.000	26.000
Size	3,433	9.549	0.858	8.183	9.001	9.594	10.067	10.944
B/M	3,433	0.393	0.228	0.081	0.241	0.384	0.503	0.741

Panel C Non-S&P REITS (2010-2022)

Variable	N	Mean	Std. Dev.	5%	25%	Median	75%	95%
Total Meetings	3,242	16.425	6.055	7.000	12.000	16.000	20.000	27.000
Monitoring Meetings	3,242	14.779	4.661	7.000	11.000	15.000	18.000	23.000
Advisory Meetings	3,242	1.646	2.918	0.000	0.000	0.000	3.000	7.000
ROA	3,242	0.065	0.068	0.022	0.042	0.054	0.067	0.096
Lag(*ROA*)	2,880	0.025	0.030	-0.020	0.009	0.025	0.043	0.067
Leverage	2,890	0.498	0.141	0.270	0.414	0.497	0.572	0.701
Board Size	3,242	8.657	1.349	6.000	8.000	9.000	10.000	11.000
Avg. Tenure	3,242	11.173	4.311	5.667	8.286	10.625	13.125	18.333
Busyness	3,236	0.961	1.204	0.000	0.000	1.000	1.000	3.000
Outsiders	3,242	0.620	0.164	0.300	0.500	0.625	0.750	0.875
CEO Chair	3,242	0.115	0.319	0.000	0.000	0.000	0.000	1.000
Firm Age	3,028	27.485	11.511	15.000	20.000	24.000	30.000	54.000
Analyst Reports	3,242	10.787	4.881	3.000	7.000	11.000	14.000	19.000
Size	2,880	7.723	0.969	5.943	7.102	7.852	8.372	9.113
B/M	2,880	0.766	3.421	0.146	0.415	0.545	0.694	1.177

Table 2 Correlation Matrix-Total Sample (2010-2022)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Total Meetings (1)		**.82**	**.62**	**-.08**	**-.12**	**.19**	**.23**	**-.32**	**.07**	**.15**	**.04**	**-.27**	**.16**	**.20**	**-.12**
Monitoring Meetings (2)	**.83**		**.13**	**-.05**	**-.13**	**.22**	**.19**	**-.22**	**.05**	.02	-.03	**-.28**	**.20**	**.26**	**-.11**
Advisory Meetings (3)	**.66**	**.13**		**-.09**	**-.08**	**.07**	**.17**	**-.31**	**.04**	**.23**	**.09**	**-.07**	**-.05**	-.03	-.02
ROA (4)	**-.10**	**-.05**	**-.11**		**.40**	.00	**.04**	**.08**	.03	-.02	**.08**	**.08**	**.14**	**.31**	**-.44**
Lag(*ROA*) (5)	**-.12**	**-.10**	**-.09**	**.15**		**-.10**	**.05**	**.07**	-.01	.02	**.04**	**.27**	**.09**	**.31**	**-.26**
Leverage (6)	**.21**	**.23**	**.05**	**-.04**	**-.12**		.01	.00	-.03	-.01	**-.06**	**-.27**	**-.04**	-.02	**-.31**
Board Size (7)	**.23**	**.17**	**.18**	**.06**	**.10**	**.09**		**-.09**	**.03**	**.21**	**.24**	**.16**	**.30**	**.46**	**-.27**
Avg. Tenure (8)	**-.36**	**-.27**	**-.27**	**-.11**	**.11**	**-.05**	**-.07**		**-.06**	**-.22**	**.03**	**.11**	.01	**-.17**	**-.07**
Busyness (9)	**.07**	**.07**	.02	-.02	.00	-.02	.03	**-.05**		-.02	.01	.00	**.06**	**.09**	**-.03**
Outsiders (10)	**.13**	.01	**.22**	**.03**	.01	**.04**	**.21**	**-.20**	**-.04**		**.04**	-.01	**.17**	**.19**	**-.08**
CEO Chair (11)	**.03**	-.01	**.08**	.00	**.06**	**-.06**	**.23**	**.04**	.00	**.05**		**-.06**	**.24**	**.31**	**-.18**
Firm Age (12)	**-.26**	**-.27**	**-.10**	**.07**	**.21**	**-.30**	**.10**	**.06**	-.01	**-.05**	**-.12**		**-.19**	-.01	**.07**
Analyst Reports (13)	**.18**	**.21**	**.03**	**-.11**	**.10**	-.02	**.27**	**-.04**	**.05**	**.16**	**.23**	**-.26**		**.71**	**-.32**
Size (14)	**.21**	**.26**	.01	**.11**	**.30**	**.05**	**.42**	**-.17**	**.08**	**.17**	**.29**	**-.06**	**.72**		**-.50**
B/M (15)	-.02	.00	-.03	-.03	**-.07**	**-.10**	**-.06**	.01	.00	**-.04**	**-.04**	.01	**-.12**	**-.25**	

Notes: All variable definitions are summarized in Appendix 1. Pearson correlations are below the main diagonal, and Spearman correlations are above the main diagonal. Correlations in bold are significant at the 0.01 level (two tailed).

Table 3 Determinants of Board Meetings (Clustered by Director)

Panel A Total REITs (2010-2022, N=6,092)

Dependent Variables	*Ln(Total Meetings)*		*Ln(Monitoring Meetings)*		*Ln(Advisory Meetings)*	
	Coefficient	*t-stat*	*Coefficient*	*t-stat*	*Coefficient*	*t-stat*
Intercept	2.137***	(27.82)	2.170***	(34.56)	-0.282	(-1.23)
ROA	-0.687***	(-2.88)	-0.134	(-0.69)	-3.089***	(-3.94)
Lag(*ROA*)	-1.175***	(-6.64)	-0.960***	(-5.97)	-1.845***	(-4.47)
Leverage	0.212***	(4.74)	0.235***	(5.97)	0.073	(0.58)
Board Size	0.030***	(5.68)	0.017***	(3.96)	0.094***	(6.11)
Director Tenure	-0.004***	(-4.26)	-0.003***	(-3.39)	-0.010***	(-3.91)
Busyness	0.016**	(2.02)	0.012*	(1.87)	0.022	(1.06)
Outsiders	0.110**	(2.23)	-0.075*	(-1.86)	0.963***	(7.96)
CEO Chair	-0.049***	(-2.93)	-0.086***	(-6.50)	0.185***	(3.33)
Firm Age	-0.009***	(-7.68)	-0.008***	(-7.67)	-0.007***	(-2.72)
Analyst Reports	-0.007***	(-3.73)	-0.003*	(-1.69)	-0.031***	(-5.73)
Size	0.084***	(8.14)	0.081***	(10.00)	0.026	(0.82)
B/M	0.009***	(8.27)	0.011***	(11.48)	-0.012***	(-4.64)
Year fixed effect included	Yes		Yes		Yes	
Clustered at director level	Yes		Yes		Yes	
Adj. R^2	24.80%		26.26%		14.76%	

Panel B S&P 500 REITs (2010-2022, N=3,432)

Dependent Variables:	*Ln(Total Meetings)*		*Ln(Monitoring Meetings)*		*Ln(Advisory Meetings)*	
	Coefficient	*t-stat*	*Coefficient*	*t-stat*	*Coefficient*	*t-stat*
Intercept	2.387***	(26.04)	2.084***	(26.06)	1.551***	(3.69)
ROA	-0.872***	(-4.35)	0.350**	(2.17)	-6.530***	(-7.06)
Lag(*ROA*)	-0.271**	(-2.49)	-0.219**	(-2.35)	-0.997**	(-2.20)
Leverage	0.050*	(1.34)	0.155***	(5.14)	-0.384***	(-2.78)
Board Size	0.055***	(15.59)	0.027***	(7.80)	0.184***	(12.82)
Director Tenure	-0.002*	(-1.87)	-0.001**	(-1.99)	-0.003	(-0.78)
Busyness	-0.007	(-1.19)	-0.002	(-0.39)	-0.023	(-0.94)
Outsiders	0.419***	(9.15)	0.184***	(5.58)	1.332***	(7.91)
CEO Chair	0.025*	(1.95)	-0.041***	(-3.92)	0.350***	(5.98)
Firm Age	-0.012***	(-11.21)	-0.012***	(-12.19)	0.002	(0.84)
Analyst Reports	-0.009***	(-5.18)	-0.007***	(-4.15)	-0.021***	(-3.74)
Size	0.025**	(2.51)	0.073***	(9.99)	-0.264***	(-5.92)
B/M	-0.049*	(-1.91)	0.101***	(4.33)	-0.813***	(-7.93)
Year fixed effect included	Yes		Yes		Yes	
Clustered at director level	Yes		Yes		Yes	
Adj. R^2	41.86%		34.49%		36.80%	

Panel C Non-S&P 500 REITs (2010-2022, N=2,660)

Dependent Variable	*Ln(Total Meetings)*		*Ln(Monitoring Meetings)*		*Ln(Advisory Meetings)*	
	Coefficient	*t-stat*	*Coefficient*	*t-stat*	*Coefficient*	*t-stat*
Intercept	2.538***	(18.69)	2.500***	(22.07)	0.180	(0.50)
ROA	-2.108***	(-4.39)	-1.341***	(-3.95)	-5.210***	(-3.86)
Lag(*ROA*)	-1.716***	(-4.90)	-1.551***	(-4.68)	-0.962	(-1.28)
Leverage	0.557***	(7.29)	0.503***	(7.62)	0.574***	(2.68)
Board Size	-0.033***	(-3.93)	-0.024***	(-3.37)	-0.031	(-1.32)
Director Tenure	-0.004**	(-2.57)	-0.002*	(-1.66)	-0.010***	(-3.21)
Busyness	0.021**	(1.97)	0.015	(1.58)	0.031	(1.06)
Outsiders	-0.382***	(-4.57)	-0.421***	(-5.86)	-0.012	(-0.06)
CEO Chair	-0.365***	(-8.27)	-0.298***	(-7.11)	-0.422***	(-5.68)
Firm Age	-0.005***	(-4.01)	-0.003***	(-3.04)	-0.011***	(-3.05)
Analyst Reports	0.004	(1.27)	0.007***	(2.61)	-0.021**	(-2.55)
Size	0.103***	(6.89)	0.075***	(5.83)	0.172***	(3.84)
B/M	0.011***	(9.09)	0.011***	(10.14)	0.001	(0.38)
Year fixed effect included	Yes		Yes		Yes	
Clustered at director level	Yes		Yes		Yes	
Adj. R^2	34.15%		31.52%		12.37%	

Notes: All variable definitions are summarized in Appendix 1. *, **, and *** denote statistical significance at 10%, 5%, and 1% levels, respectively. Year fixed effects are included in the estimation. Standard errors are clustered by director.

In Panel A (all REITs), both *ROA* and *Lag*(*ROA*) are negatively associated with various meeting frequency measures, which is consistent with previous studies in the literature that boards increase meeting intensity following poor performance and heightened agency concerns (Vafeas, 1999; Adams, 2003). This finding is consistent with the board monitoring role. The negative association between performance and advisory meetings is particularly strong, which is consistent with the idea that boards devote more time to strategic and remedial deliberation when firm performance has deteriorated (Schwartz-Ziv and Weisbach, 2013). *Leverage* is positively associated with total and monitoring meetings but not advisory meetings, which is consistent with higher leverage calls for more attention in the domains of compliance, covenants, and refinancing. *Firm Age* is uniformly negative across total, monitoring, and advisory meetings, thus suggesting that more mature REITs operate with more routinized processes and require fewer formal gatherings. *Size* is strongly positive for total and monitoring meetings, which is consistent with complexity and information-processing demands with an increase in the organizational scope. *B/M* ratios, typically associated with lower growth prospects, are positively related to total and monitoring meetings but negatively related to advisory meetings. This suggests that REIT boards, challenged with lower growth prospects, often devote relatively more attention to operational oversight, asset performance, and capital discipline, whereas firms with stronger growth opportunities appear to engage boards more heavily in advisory discussions related to expansion, acquisitions, or strategic repositioning. Thus, *B/M* appears to capture variation in the strategic versus operational focus of board activity rather than variations in governance intensity. The coefficient of *Analyst Reports* is negatively associated with all meeting types, which is consistent with the standard substitution hypothesis in the governance literature, which means that holding everything else constant, external monitoring by analysts reduces information asymmetry and therefore reduces the need for intensive board oversight (Bushman et al., 2004).

Panel A also shows a coherent pattern for governance structure and director characteristics. *Board Size* is positive across all three meeting types, which is consistent with the view that board capacity and committee infrastructure facilitate more active engagement in settings where governance is already structured (Boone et al., 2007; Coles et al., 2008). Board independence, proxied by *Outsiders*, is positive for total meetings and especially strong for advisory meetings, but negative for monitoring meetings. This split is consistent with a "dual role" board framework in which outsiders contribute more to strategic counsel and external resource provision, while the allocation of monitoring effort can depend on the committee structure and leadership dynamics (Adams and Ferreira, 2007). The coefficient of CEO duality (*CEO Chair*) is negative for total and monitoring meetings but positive for advisory meetings, thereby indicating that concentrated leadership is associated with less formal monitoring activity while still sustaining, and/or perhaps redirecting toward, advisory-oriented discussion, which is consistent with theories of decision control and information flow under powerful CEOs (Fama and Jensen, 1983;

Adams and Ferreira, 2007; Graham et al., 2020). It should be noted that the negative association for total and monitoring meetings with CEO duality raises concerns that dual leadership can potentially compromise board independence, thus reducing accountability and oversight mechanisms (Rechner and Dalton, 1991; Boyd, 1995; Kim et al., 2009; Alves, 2023). *Director Tenure* is uniformly negative and should be interpreted with caution. On the one hand, experienced directors require less formal interaction to understand firm operations and managerial decisions (e.g., Huang and Hilary (2018)). On the other hand, extended tenure can weaken monitoring incentives as directors become more aligned with management or less willing to challenge established practices, thus potentially leading to reduced oversight intensity (Vafeas, 1999; Coles et al., 2012; and Naveen, 2014), which can result in diminished board vigilance. *Busyness* is positively associated with total meetings and weakly positively associated with monitoring meetings but not advisory meetings; this pattern fits the mixed predictions in the literature where multiple directorships can reflect reputation and expertise yet also potential time constraints (Ferris et al., 2003).

4.2 S&P 500 REITs

Panels B and C of Table 3 show that many of these relations are not uniform across the REIT universe, and the contrast is especially clear for board structure, leadership, and the information environment.

For S&P 500 REITs (Panel B), the coefficient of *ROA* for firm performance is negatively significant for total and advisory meetings but positively significant for monitoring meetings, while the coefficients of *Lag*(*ROA*) remain negatively significant across all three meeting types. This combination suggests that S&P REIT boards exhibit an active monitoring "baseline" even when current performance is strong while reducing strategic deliberation when the financial performance of the firm is good. In addition, the coefficients of *Lag*(*ROA*) are negatively significant across all meeting types, thus suggesting that these large REITs respond more systematically to persistent performance trends.

For financial risk and firm characteristics, the coefficient of *Leverage* is positively significant for total and monitoring meetings but negatively significant for advisory meetings, thus suggesting increased financial risk constrains strategic deliberation, and board engagement is more focused on compliance and oversight. The coefficient of *Size* is positively significant for total and monitoring meetings but negatively significant for advisory meetings, thereby implying that for S&P REITs firms, advisory activity may be relatively less important once other controls are included.

For growth opportunities, the coefficient of *B/M* is negatively significant for total and advisory meetings but positively significant for monitoring meetings, which suggests that valuation characteristics relate differently to the composition of board work for these larger REITs.

For board characteristic variables, *Board Size* and *Outsiders* are positively associated with total, monitoring, and advisory meetings. This is evidence that the more visible, larger and more independent board engagement of S&P REITs reflects active governance rather than being merely symbolic (Adams and Ferreira, 2007). *CEO Chair* is positively associated with total and advisory meetings but negatively associated with monitoring meetings, which suggests that when leadership is concentrated, there is a shift in the composition of board effort (Fama and Jensen, 1983; Adams and Ferreira, 2007). *Director Tenure* remains negative for total and monitoring meetings but insignificant for advisory meetings; overall, the signs are consistent with the full sample result (Panel A) and should be interpreted with caution. The coefficient of *Outsiders* is positively associated with total, monitoring, and advisory meetings, thus indicating that independent directors contribute to both oversight and strategic engagement when firms are subject to greater market scrutiny and more transparent information environments. Similarly, the coefficient of *Analyst Reports* is uniformly negative across meeting types, which is consistent with the monitoring substitution hypothesis (Bushman et al., 2004).

4.3 Non-S&P 500 REITs

For non-S&P 500 REITs (Panel C of Table 3), the coefficients of *ROA* for firm performance are negatively significant across all meeting types, thus suggesting a more uniform reactive pattern when weaker financial performance triggers broader increases in board activities for smaller REITs.

For financial risk and firm characteristics, the coefficients of *Leverage* are positive across all three meeting types, which indicates that financial risk is associated with more meetings not only for monitoring but also for advisory discussion, and suggests that for smaller REITs, firms need to address financial and strategic challenges simultaneously. The coefficient of *Firm Age* is negatively significant across all three meeting types, which is consistent with the findings for S&P REITs that firm maturation reduces the need for frequent board meetings. The coefficient of *Size* is positively significant across all meeting types, thereby indicating that firm complexity still matters even outside the S&P segment.

For growth opportunities, the coefficient of *B/M* is positively significant for total and monitoring meetings but insignificant for advisory meetings, unlike the significantly negative coefficient for advisory meetings in Panel B. It is possible that *B/M* captures differences in the strategic versus operational focus of board activity: in large, highly followed S&P REITs, growth opportunities appear to drive advisory engagement, whereas in smaller non-S&P REITs, low growth increases monitoring intensity without necessarily generating additional strategic deliberation.

For the board characteristic variables, the coefficients of *Board Size* are negatively significant for total and monitoring meetings. The results are a bit different from those of the pooled sample and S&P 500 REITs. This is the type of heterogeneity that can yield confusing averages if one attempts to interpret the pooled sample and treat all REITS as the same. In smaller, less visible REITs, a larger board may reflect coordination friction or less structured processes that do not translate into more frequent formal meetings, whereas in S&P REITs, larger boards appear to support more active engagement (Boone et al., 2007; Coles et al., 2008). The coefficient of *Outsiders* also flips sign and becomes negatively significant for total and monitoring meetings, thereby suggesting that independence in non-S&P REITs may not function as a driver of monitoring intensity in the same way as it does among S&P firms. This reversal suggests that board independence does not uniformly translate into active governance in smaller REITs and may instead reflect symbolic compliance. The implication is that board independence is more effective when supported by strong informational environments and investor oversight, which is consistent with theories that external monitoring complements, rather than substitutes for, internal governance mechanisms. *CEO Chair* is uniformly negative across all meeting types; again, this is consistent with greater managerial dominance and reduced formal governance activity in environments with weaker external constraints. The coefficient of *Busyness* is positive for total meetings but not for monitoring or advisory meetings, thereby indicating that the reputational/network channel (Ferris et al., 2003) may affect the convening frequency of boards, but not necessarily for the mix of meeting purpose.

Finally, the coefficient of *Analyst Reports* is positive for monitoring meetings, insignificant for total meetings, and negative for advisory meetings. This mixed pattern suggests that in non-S&P REITs, external information production may not cleanly substitute for internal oversight in the same way as that it does in S&P REITs; instead, analyst activity may coincide with heightened monitoring demands and a more uneven external-governance channel relative to the large-firm segment (Bushman et al., 2004).

Taken together, our results show that board meeting frequency in REITs reflects adaptive governance responses shaped by firm growth opportunities, risk exposure, and institutional visibility. In large, index-included REITs, board structures appear to support continuous oversight and advisory engagement. In contrast, smaller non-S&P REITs exhibit more episodic governance patterns in which meeting activity responds more strongly to performance shocks and financial risk. These findings underscore that board processes are shaped not only by internal governance structures but also by the informational and institutional environments in which firms operate, thus reinforcing the importance of examining governance behavior directly rather than relying solely on board composition measures.

4.4 Endogeneity Assessment: Evidence on the Reactive Nature of Board Meetings

To address potential endogeneity concerns in our main specification, we conduct an additional analysis that examines whether board meeting frequency responds systematically to prior firm conditions. Specifically, we analyze the following model:

$$\begin{aligned} Ln(Avg.Meetings)_{i,t} &= \beta_0 + \beta_1 Lag(ROA)_{i,t} \\ &+ \beta_2 Lag(ROA\ Volatility)_{i,t} + \beta_3 Size_{i,t} \\ &+ \beta_4 Leverage_{i,t} + \beta_5 B/M_{i,t} + \beta_6 Firm\ Age_{i,t} \\ &+ \beta_7 Analyst\ Reports_{i,t} + \beta_w \upsilon_t + \varepsilon_{i,t} \end{aligned} \quad (2)$$

where *Avg. Meetings* are the average of *Total Meetings*, *Monitoring Meetings*, and *Advisory Meetings* respectively. *ROA Volatility* is the five-year rolling window of the standard deviation of *ROA*. The results are reported in Table 4.

We find that current period *Lag*(*ROA*) is negatively associated with subsequent board meetings across all specifications, thus suggesting that firms that experience weaker prior performance subsequently hold more board meetings. We interpret the result as evidence that board activity is largely reactive to firm performance rather than exogenously determined. These findings are consistent with previous studies in the literature that, rather than serving as an ex-ante mechanism that improves future outcomes, board meeting frequency is largely reactive triggered by performance deterioration and/or monitoring needs (Vafeas, 1999; Adams, 2009; Schwartz-Ziv and Weisbach, 2013). Similarly, ROA volatility is positively associated with monitoring meetings, which further indicates that boards respond to heightened risk and uncertainty.

We also analyze whether current period board meeting frequencies predict one-period-ahead firm performance, measured by using *ROA*. However, board meeting activity does not appear to predict future firm performance across the three types of board meeting specifications, thus suggesting that board meeting frequency is not a reliable indicator of governance effectiveness for future operating results, i.e., simply convening more meetings does not translate into improved subsequent firm performance improvement. This is consistent with the interpretation that board meetings may be viewed as reactive oversight and/or compliance rather than a proactive value-enhancing process. This result confirms that board meeting frequency does not function as a forward-looking or proactive governance mechanism that improves future operating outcomes. For brevity, the findings are not tabulated.

Table 4 Association Between Firm Characteristics and Board Meeting Frequency (2010-2022, N=527)

Dependent Variable	*Ln(Avg. Total Meetings)*		*Ln(Avg. Monitoring Meetings)*		*Ln(Avg. Advisory Meetings)*	
	Coefficient	*t-stat*	*Coefficient*	*t-stat*	*Coefficient*	*t-stat*
Intercept	1.933***	(6.56)	1.888***	(7.99)	0.028	(0.03)
Lag(ROA)	-2.586***	(-3.32)	-1.897***	(-2.93)	-4.155**	(-2.15)
ROA Volatility	0.045	(1.35)	0.064**	(2.55)	-0.099	(-1.08)
Size	0.125***	(3.16)	0.107***	(3.45)	0.135	(1.20)
Leverage	0.356**	(2.25)	0.358***	(2.96)	0.282	(0.61)
B/M	0.101	(1.31)	0.119*	(1.69)	-0.042	(-0.23)
Firm Age	-0.006	(-1.49)	-0.006	(-1.63)	-0.002	(-0.18)
Analyst Reports	-0.010	(-1.32)	-0.005	(-0.73)	-0.037*	(-1.72)
Year fixed effect included	Yes		Yes		Yes	
Clustered at firm level	Yes		Yes		Yes	
Adj. R^2	21.06%		25.36%		3.99%	

Notes: All other variable definitions are outlined in Appendix 1. *, **, and *** denote statistical significance at 10%, 5%, and 1% levels, respectively. Year fixed effects are included in the estimation. Standard errors are clustered by firm.

4.5 Robustness Analyses: Board Meeting Frequency Determinants – Clustered by Firms

To determine whether the main findings in Table 3 are robust, we re-estimate a similar model while clustered at the firm level:

$$\begin{aligned} Ln(Meetings)_{i,t} = {} & \beta_0 + \beta_1 ROA_{i,t} + \beta_2 Lag(ROA)_{i,t} \\ & + \beta_3 Leverage_{i,t} + \beta_4 Board\ Size_{i,t} \\ & + \beta_5 Avg\ Tenure_{i,t} + \beta_6 Outsiders_{i,t} \\ & + \beta_7 CEO\ Chair_{i,t} + \beta_8 Firm\ Age_{i,t} \\ & + \beta_9 Analyst\ Reports_{i,t} + \beta_{10} Size_{i,t} + \beta_{11} B/M_{i,t} \\ & + \beta_w \upsilon_t + \varepsilon_{i,t} \end{aligned} \quad (3)$$

where *Meetings* are *Total Meetings*, *Monitoring Meetings*, and *Advisory Meetings* respectively. *Avg Tenure* is the average tenure of a board director for a given period of time. The results are reported in Table 5.

Panel A: Full REIT Sample

Comparing Panel A of Tables 3 and 5, the coefficient on director *Tenure* remains negative and statistically significant across all meeting types, regardless of whether tenure is measured at the individual director level (Table 3) or as an average board-level measure (Table 5). This reinforces the interpretation that either more experienced boards rely less on frequent formal interactions (e.g., Huang and Hilary (2018)), or extended tenure may weaken monitoring incentives as directors become more aligned with management, thus potentially leading to reduced oversight intensity (Vafeas, 1999; Coles et al., 2012; 2014).

While the coefficient of *Board Size* remains positively significant for total and advisory meetings, it is no longer significant for monitoring meetings. Similarly, the firm-level clustering produces somewhat lower statistical significance for performance variables relative to Table 3 as well, which is expected given the loss of within-board variation when moving from director-level to firm-level data. However, the directional patterns remain consistent across *Size*, *Leverage*, *B/M* and board characteristics.

Panel B: S&P 500 REITs

A comparison of Panel B in Tables 3 and 5 shows that the coefficients on *Board Size* remain positive and statistically significant across all meeting types. This finding suggests that, in highly scrutinized firms such as S&P 500 REITs, larger boards are associated with more formal engagement, as reflected in higher board meeting frequency and higher expectations for active governance.

Although several coefficients lose statistical accuracy under firm-level clustering, most notably, the performance variables, consistency in sign and magnitude indicate that the interpretation of board meetings as responses to organizational complexity and governance structure remains valid in large REITs.

Table 5 Robustness Analysis (2010-2022, Clustered by Firm)

Panel A Total REITs (N=6,099)

Dependent Variable	*Ln(Total Meetings)*		*Ln(Monitoring Meetings)*		*Ln(Advisory Meetings)*	
	Coefficient	*t-stat*	*Coefficient*	*t-stat*	*Coefficient*	*t-stat*
Intercept	2.565***	(10.56)	2.454***	(11.62)	0.681	(0.86)
ROA	-0.600	(-0.86)	-0.082	(-0.14)	-2.848	(-1.14)
Lag(*ROA*)	-0.837	(-1.58)	-0.734	(-1.54)	-1.095	(-0.77)
Leverage	0.218	(1.47)	0.241*	(1.89)	0.066	(0.16)
Board Size	0.029*	(1.82)	0.017	(1.30)	0.093*	(1.86)
Avg. Tenure	-0.026***	(-4.86)	-0.017***	(-3.50)	-0.058***	(-4.29)
Outsiders	0.021	(0.14)	-0.135	(-1.1)	0.763	(2.09)
CEO Chair	-0.041	(-0.83)	-0.081**	(-2.05)	0.203	(1.09)
Firm Age	-0.008**	(-2.35)	-0.007**	(-2.32)	-0.005	(-0.77)
Analyst Reports	-0.005	(-0.83)	-0.002	(-0.29)	-0.026	(-1.51)
Size	0.063**	(2.00)	0.067***	(2.76)	-0.022	(-0.21)
B/M	0.008**	(2.36)	0.010***	(3.69)	-0.016*	(-1.82)
Year fixed effect included	Yes		Yes		Yes	
Clustered at firm level	Yes		Yes		Yes	
Adj. R^2	31.24%		30.06%		19.20%	

Panel B S&P 500 REITs (N=3,433)

Dependent Variable	*Ln(Total Meetings)*		*Ln(Monitoring Meetings)*		*Ln(Advisory Meetings)*	
	Coefficient	*t-stat*	*Coefficient*	*t-stat*	*Coefficient*	*t-stat*
Intercept	2.616***	(8.33)	2.275***	(7.77)	1.832	(1.20)
ROA	-0.925*	(-1.75)	0.303	(0.54)	-6.585**	(-2.17)
Lag(*ROA*)	-0.218	(-0.56)	-0.177	(-0.56)	-0.923	(-0.54)
Leverage	0.029	(0.25)	0.136	(1.34)	-0.400	(-0.81)
Board Size	0.054***	(5.09)	0.027**	(2.65)	0.183***	(3.62)
Avg. Tenure	-0.013*	(-1.71)	-0.011*	(-1.79)	-0.017	(-0.61)
Outsiders	0.319**	(2.44)	0.102	(0.98)	1.201**	(2.08)
CEO Chair	0.025	(0.60)	-0.041	(-1.24)	0.351	(1.67)
Firm Age	-0.012***	(-3.45)	-0.012***	(-3.71)	0.002	(0.26)
Analyst Reports	-0.009	(-1.63)	-0.007	(-1.28)	-0.020	(-1.04)
Size	0.022	(0.59)	0.071***	(3.02)	-0.269	(-1.63)
B/M	-0.050	(-0.63)	0.100	(1.49)	-0.812**	(-2.31)
Year fixed effect included	Yes		Yes		Yes	
Clustered at firm level	Yes		Yes		Yes	
Adj. R^2	43.71%		36.29%		37.03%	

Panel C Non-S&P 500 REITs (N=2,666)

Dependent Variable	*Ln(Total Meetings)*		*Ln(Monitoring Meetings)*		*Ln(Advisory Meetings)*	
	Coefficient	*t-stat*	*Coefficient*	*t-stat*	*Coefficient*	*t-stat*
Intercept	2.757***	(6.97)	2.624***	(7.61)	0.863	(0.80)
ROA	-1.523	(-1.01)	-1.020	(-0.95)	-3.305	(-0.81)
Lag(*ROA*)	-1.345	(-1.20)	-1.332	(-1.25)	0.092	(0.05)
Leverage	0.571**	(2.50)	0.518**	(2.70)	0.555	(0.82)
Board Size	-0.026	(-1.08)	-0.020	(-0.92)	-0.012	(-0.19)
Avg. Tenure	-0.021***	(-2.86)	-0.013*	(-1.70)	-0.061	(-4.15)
Outsiders	-0.347	(-1.32)	-0.402*	(-1.72)	0.104	(0.19)
CEO Chair	-0.336**	(-2.54)	-0.281**	(-2.16)	-0.335	(-1.69)
Firm Age	-0.004	(-1.04)	-0.003	(-0.75)	-0.007	(-0.97)
Analyst Reports	0.006	(0.65)	0.009	(0.94)	-0.013	(-0.57)
Size	0.079	(1.50)	0.062	(1.36)	0.093	(0.69)
B/M	0.010**	(2.61)	0.011***	(3.03)	-0.003	(-0.30)
Year fixed effect included	Yes		Yes		Yes	
Clustered at firm level	Yes		Yes		Yes	
Adj. R^2	37.43%		33.03%		17.96%	

Notes: All variable definitions are outlined in Appendix 1. *, **, and *** denote statistical significance at 10%, 5%, and 1% levels, respectively. Year fixed effects are included in the estimation. Standard errors are clustered by firm.

Panel C: Non-S&P 500 REITs

A comparison of Panel C in Tables 3 and 5 shows that the coefficients on *CEO Chair* remain negative and statistically significant for both total and monitoring meetings. This finding reinforces the interpretation that concentrated leadership in firms facing lower levels of external scrutiny is associated with reduced formal governance activity. *Leverage* continues to exhibit a positive association with total and monitoring meetings, which suggests that boards of smaller REITs respond strongly to financial exposure and monitoring needs.

Across all panels, a comparison of Tables 3 and 5 shows that the main conclusions hold under alternative aggregation and clustering. While firm-level clustering yields relatively weaker results, the directional patterns observed in Table 3 remain consistent. Taken together, we believe that our findings support the interpretation that board meeting frequency reflects firm conditions, governance structure, and organizational complexity.

5. Conclusions

This paper provides evidence on how board meeting activity reflects the functioning of corporate governance in REITs. We show that board meetings are primarily reactive responses to firm performance, financial risk, and uncertainty rather than proactive mechanisms that improve future outcomes. Across the REIT universe, boards meet more frequently when performance declines, leverage increases, or volatility is enhanced, thus indicating that meeting activity serves as a governance response to emerging challenges. At the same time, the composition of meetings shifts with the growth opportunities of firms and informational conditions, which suggests that board meetings reflect changes in governance focus rather than governance intensity alone.

Our results further reveal that institutional context plays a central role in shaping governance processes. In large, highly visible S&P 500 REITs, board structure variables such as size and independence translate into active monitoring and advisory engagement, which is consistent with governance operating within a strong informational and market discipline environment. In contrast, smaller non-S&P 500 REITs exhibit more episodic governance patterns in which board activity responds more broadly to performance shocks and financial risk, and where structural governance attributes do not consistently lead to more engagement. These findings indicate that governance effectiveness not only depends on the board composition but also the informational environment in which boards operate.

From a practical perspective, the evidence suggests that board meeting frequency should not be interpreted as a standalone measure of governance quality. For managers and directors, increased meeting activity may signal emerging operational or financial pressure rather than more oversight. For

investors and analysts, changes in board activity may provide useful information about firm conditions, but not necessarily about future performance improvements. For regulators and standard setters, the results highlight the value of transparency regarding board processes and meeting functions, as structural governance disclosures alone may not fully capture how boards operate in practice. More broadly, the study underscores the importance of examining board processes directly, as governance behavior is shaped jointly by internal structures and external informational forces.

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Appendix

Appendix I Variable Definition

Total Meetings	The sum of all monitoring and advisory committee meetings each year.
Monitoring Meetings	The sum of all monitoring committee meetings each year.
Advisory Meetings	The sum of all advisory committee meetings each year.
ROA	Funds from operations divided by total assets each year.
Lag(*ROA*)	One-year lag of *ROA*.
Leverage	Debt to asset ratio (total debt/total assets) each year.
Board Size	Number of board members each year.
Avg. Tenure	The average tenure of the entire board. Calculated as the sum of tenure of all board members (*Director Tenure*) in each REIT divided by the board size.
Busyness	Number of additional directorships of director.
Outsiders	Ratio of outside directors on board.
CEO Chair	Dummy variable that equals 1 if CEO chairs the board and 0 otherwise.
Firm Age	Number of years since the IPO of REIT
Analyst Reports	Number of analyst recommendations for a REIT each year.
Size	Natural log of total assets.
B/M	Book value of equity divided by market value of equity.