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Characteristics of Directors, Composition of **Board Committees, and Firm Performance:** The Case of U.S. Equity REITs

Magdy C. Noguera*

University of Idaho, United States, Email: mnoguera@uidaho.edu

This paper investigates the composition of REIT board committees in terms of the real estate expertise of the directors, type of director, gender, and tenure and the impact of these characteristics on REIT performance. The sample comprises data at the director level for 65 U.S. equity REITs during the period of 2010-2019. Using chi-square tests and logistic panel regressions, I provide evidence that the profile of REIT board members varies depending on their assignment to different committees and that, overall, the average REIT director does not match the expected director profile of having significant real estate expertise or long board tenure. I also find that finance and investment committee members are directors with very different characteristics despite tat these committees are function-related advisory committees and real estate expertise is associated with investment committee membership only. Furthermore, using panel fixed effects regressions, I find that the composition of REIT committees matters for REIT performance, especially in the case of investment committees for which the presence of outside and inside directors with real estate expertise and long tenure is associated with higher REIT performance. To the best of my knowledge, this is the first study that investigates the composition of REIT board committees and its impact on REIT performance. The findings are of interest to researchers and practitioners as they show the key characteristics of directors for REIT monitoring and advisory committees and their effect on REIT performance, and this information can assist in the understanding of REIT board functioning and the designing of the optimal REIT board.

Keywords

Board of directors, Board committees, REITs, REIT performance

^{*} Corresponding author.

1. Introduction

Boards of directors execute their oversight and advisory roles mainly through committees (Adams et al., 2021, Chen and Wu, 2016). Therefore, research questions such as those that ask about the benefits and costs of committees and the allocation of directors among committees have become important as the structure of board committees and composition proxy for the methods of operation of the board of directors are not readily observable (Harrison, 1987).

In this paper, I study the composition of the mandatory monitoring committees (auditing, compensation, and nominating/governance committees) of U.S. publicly traded equity real estate investment trusts (REITs) and two of the most common non-mandatory REIT committees (investment and finance committees) that concern the real estate expertise of the directors, type of director, gender, and tenure following Kesner (1998). More importantly, I examine the impact of the composition of these committees on REIT performance. There is a distinct reason to investigate the role of committees on performance as research on the link between overall board composition and firm performance has often produced inconclusive findings.

Limiting this study to REITs has advantages and disadvantages. The biggest advantage is that this paper fills a gap in the literature as, to the best of my knowledge, no study on the composition of the board committees of REITs and their impact on performance has been carried out to date. This is most likely because REITs are typically excluded from mainstream academic research as they are regulated financial companies and such regulations have been assumed to render their governance mechanisms less important. However, I posit that studying REIT boards is important not only because boards of directors vary due to industry type and legal requirements rendering REITs worthy to be studied (Ning et al., 2007, Boone et al., 2007, Zahra and Pearce, 1989), but also because regulations have been found to complement rather than substitute corporate governance mechanisms for regulated entities such as REITs (Becher and Frye, 2011). Another advantage of focusing on REITs is that the REIT industry provides an interesting setting to study regulation-induced changes as REIT boards, like non-REIT boards, have become more independent after the Sarbanes-Oxley (SOX) Act was passed in 2002, but have kept more inside and affiliated (gray) directors (Noguera, 2023; 2012). The advantages of studying REITs are offset by the inability to generalize the results of the study due to the focus on a single industry. Still, examining this industry is worthwhile as investors, especially institutional investors, have become more interested in the corporate governance practices of REITs (Frank and Ghosh, 2012) and as REITs have grown in market capitalization and become an important component of the S&P 500 real estate sector.

This study focuses on the structure and composition of REIT committees and their impact on REIT performance as these remain empirical questions. In theory, firms should structure and staff their committees optimally by considering the monitoring and advisory roles of directors to maximize shareholder wealth. In practice, boards allocate directors between monitoring and advisory committees, and the empirical evidence on the implications of such a practice is limited and inconclusive. Lee (2020) and Chen and Wu (2016) find that boards allocate multi-committee outside directors to alleviate information segregation concerns across committees in a way that is consistent with the optimal board hypothesis. However, Liao and Hsu (2013) find that common membership across committees undermines effective governance. Furthermore, Adams et al. (2021) and Faleye et al. (2011) find empirical evidence that shows the delegation of board responsibilities to committees staffed by outside directors is inconsistent with the firm value maximization objective of boards. Likewise, Cohen et al. (2013) find that some directors think that the emphasis of the SOX Act on monitoring by the board comes at the expense of its advising role.

The findings of this study show that, contrary to previous evidence (Moody's, 2005), most REIT directors are outside directors who lack real estate expertise. In addition, I find that the make up of the committees varies depending on the visibility of the REIT. S&P 500 REIT committees have a relatively greater presence of female directors and are composed mainly of outsiders with shorter or intermediate tenures and a lack of real estate expertise. This is consistent with institutional investors who advocate for diverse boards and the trend toward board independence intensified by the SOX Act. In contrast, less visible non-S&P 500 REIT committees have a higher relative presence of affiliated directors and more real estate experts than their S&P 500 counterparts. Directors with long tenures are equally present in each type of REIT, but outnumbered by directors with short and intermediate tenures. I also find that, despite recent progress in increasing gender diversity on boards, most REIT directors are male and these male directors are more prevalently found in advisory or strategic committees compared to monitoring or compliance committees. As for the impact of committee composition on REIT performance, I find a positive relation between real estate expertise in the audit, nominating/governance, and investment committees and REIT performance. In contrast, I find a negative relation between real estate expertise in compensation and finance committees and performance, thus suggesting the misallocation of real estate expertise to these committees. The presence of outside directors in the advisory committees is negatively related to performance, which suggests that independent board members do not add value to these committees. Inside directors who sit on investment committees impact performance positively, but they hurt performance if sitting on finance committees. The tenure of directors is negatively related to performance in the case of compensation and nominating/governance committees which suggests the negative effect of entrenchment. Finally, I find that the presence of women directors is positively related to performance of the compensation, nominating/governance, and investment committees which support the need for gender diversity on boards. All of these findings have implications for governance policy. For example, as the percentage of women directors on corporate boards increases, the next step is to look at ways to obtain a greater presence of women in board leadership roles. Per the findings in this paper, having real estate expertise and strategic advising experience in the case of REIT boards would help them to attain such goals. Therefore, offering career, mentoring, and leadership opportunities to young women professionals in real estate could help to address the lack of real estate expertise, average short tenures, and underrepresentation in investment and other advisory committees and potentially improve performance.

This work enhances the understanding of the structure and composition of REIT boards and their impact on performance and contributes to the literature in several ways. In addition to being the first work focused on the composition of REIT board committees and their impact on performance, I present evidence that different REIT committees employ different types of directors and that the characteristics of the directors in the committees impact REIT performance. For example, consistent with the findings in Lee (2020), I find that the directors of audit and nominating/governance committees lack real estate expertise and have short and intermediate tenures, respectively. I also find that having real estate expertise in audit and nominating/governance committees and shorter tenures in nominating/governance committees improve performance. These findings can assist in the understanding of REIT board functioning and the designing of the optimal REIT board.

The remainder of the paper is organized as follows. Section 2 presents the theoretical framework; Section 3 presents the sample and methodology; the results and discussion follow in Section 4; and Section 5 provides the conclusions, discussions, and limitations of the study.

2. Structure and Composition of Board Committees

2.1 Structure of Board Committees

In the U.S., corporate boards perform their monitoring and advising functions through committees. Studies suggest that the structure and composition of monitoring and advisory committees can add value to firms ¹ (Reeb and Upadhyay, 2010, Klein, 2000, 1998; Noguera, 2023). However, the board

¹ For example, in the case of monitoring committees, Klein (2000) finds a negative relationship between the percentage of outside directors on boards and audit committee and abnormal accruals. In the case of advisory committees, Klein (1998) finds a positive relationship between the membership of inside directors on finance and investment committees and performance for non-REITs. Noguera (2023) finds a positive relationship between the percentage of insiders sitting on investment committees and S&P 500 REIT performance.

structure and composition of monitoring committees are not entirely for firms to decide. Regulations, with an emphasis on board independence, have had a major influence on the make up of modern U.S. boards. Due to the SOX Act, traded firms must have audit. compensation, nominating/governance committees, and these committees must be composed of independent directors. These committees are known as the monitoring committees, and firms must disclose their existence and composition to the US Securities and Exchange Commission (SEC) in their proxy statements annually. In contrast, the existence and composition of other operational or advisory committees are discretionary, and presumably, these non-mandatory committees are only created for specific tasks of importance for boards. Empirical evidence shows that there is a positive relation between the number of committees of a firm and firm size, board size, percentage of outsiders on the boards, and firm age (Chen and Wu, 2016) and that the number of committees has increased after the SOX Act was passed (Adams et al., 2021). The most popular advisory committees for non-REITs are the executive committees followed by the finance committees and strategy committees (Chen and Wu, 2016) while for REITs, from my sample, the most popular advisory committees are executive committees and investment committees2, followed by finance committees.

2.2 Characteristics of Directors and Composition of Boards Committees

The empirical evidence on the composition of board committees is limited for non-REITs and non-existent for REITs. For non-REITs, Kesner (1988) finds that members of monitoring committees and the executive committee are more likely to be outsiders, with business experience, and long tenures. However, Lee (2020) finds that busy directors with long tenures, no financial expertise, and little director and executive experience sit on monitoring committees while directors with long tenures, executive experience, and no financial expertise sit on extra committees (Lee, 2020). The discrepancy between the findings of Kesner (1988) and Lee (2020) is consistent with those of Boone et al.(2007) that board composition changes with time to accommodate the specific growth and managerial characteristics of firms, and can also result from regulatory changes that have occurred in the time that has elapsed between the two studies, particularly with the enactment of the SOX Act. Lee (2020) develops and finds support for the optimality hypothesis on how firms structure board committees. The optimality hypothesis states that firms consider the professional experience of each director when forming committees. For example, firms should appoint audit committee directors with sufficient financial knowledge. The

² A variety of committee names are used by REITs that have investment committees. No name is dominant but real estate committees and planning committees are the most common. Other names are long-range planning committees, strategy committees, etc. I confirmed that all of these committees are mainly engaged in investment functions by reading the committee descriptions in the proxy statements.

compensation and nominating committees should consist of independent directors who are able and willing to monitor management. Industry expertise is a requirement to fulfill an advisory role on extra (advisory) committees. In other words, industry expertise is a preferred qualification to be part of monitoring and advisory committees. However, Lee (2020) finds mixed results on how the professional background of directors affects the type of committee that they sit on. Specifically, a director with industry expertise is more likely to sit on an advisory rather than monitoring committee and mainly fulfill an advisory role. However, directors with same-industry expertise have professional ties to other companies in the industry which raises potential conflicts of interest and makes them unsuitable for membership on monitoring committees.

In addition, Lee (2020) finds that firms rely heavily on reputable, long-tenured directors to form board committees. Therefore, another variable that may affect committee assignment is the tenure of outside directors as long-tenured independent directors are able to understand the firm better, and such knowledge helps them to fulfill their monitoring and advisory roles.

2.3 REIT Committee Membership

2.3.1 Real Estate Expertise of Directors

Moody's (2005) highlights that REIT boards have more directors with knowledge of the real estate industry, relative to the boards of banks and insurance companies. Ideally, all corporate directors have relevant business and industry expertise that enhances their ability to monitor and advise management. However, REIT boards may collectively lack real estate expertise due to excessive demand for outside directors resulting from the enactment of the SOX Act and limited supply of independent directors with real estate expertise required to build "supermajority independent boards" (Linck et al. 2009, Knyazeva et al. 2013). As a consequence, boards may end up allocating their few directors with real estate expertise to advisory committees or committees that specialize in specific tasks. Therefore, given the strategic advising provided by investment committees and that these committees most likely benefit from having members with real estate expertise, I hypothesize that:

H1: There will be disproportionally more directors with real estate expertise on REIT investment committees than audit, compensation, nominating/governance, and finance committees.

2.3.2 Type of Director

Regulations require that audit, compensation, and nominating/corporate governance committees must be composed of independent (outside) directors only. This recent trend toward board independence has resulted in an overall increase in outside directors at the expense of inside and gray directors on

corporate boards (Gordon, 2007). In fact, Adams et al. (2021) find that over 90 percent of non-REIT committees do not have an inside director as a formal member. However, we have limited knowledge of how both outside and the remaining inside directors are assigned to different board committees. Lee (2020) finds that non-REITs assign independent directors with long tenures to sit on monitoring and advisory committees (multitasking directors) and that this allocation results in higher firm performance and less CEO compensation, especially in the case of long-tenured CEOs. These results are interpreted as evidence that non-REITs structure their committees optimally. However, an alternative and plausible explanation for the assignment of outside directors to monitoring and advisory committees in their study is simply that outside directors represent most of the board members with around 85 percent of all directors in their sample. Given this empirical evidence and the legal restrictions placed on inside directors to sit on monitoring committees that apply to REITs and non-REITs, I hypothesize that:

H2: There will be disproportionally more outside than inside and gray directors on REIT monitoring and advisory committees.

2.3.3 Gender of Directors

Women directors represented 26 percent of all directors in S&P 500 firms in 2019 (Spencer Stuart, 2019). In contrast, women represented 22 percent of REIT directors (Noguera, 2020), thus indicating that women directors are still largely underrepresented on REIT and non-REIT boards, but more so on the former, which is a largely masculine industry. Therefore, I hypothesize that:

H3: There will be disproportionally more male directors than female directors on REIT monitoring and advisory committees.

2.3.4 Tenure of Directors

Inside and outside directors with long tenures (Kim et al., 2014) are expected to have more knowledge of the given REIT and overall real estate industry. Therefore, I propose that:

H4: REIT investment committees will have disproportionally more directors with a longer tenure than REIT audit, compensation, nominating/governance committees, and finance committees.

2.4 Composition and Performance of REIT Committees

Supply and demand of directors impact the availability and profile of prospective directors. Chen and Moers (2018) show that the SOX Act has increased the demand for independent directors, especially those with financial expertise. The SOX Act has also reduced the number of directorships held by existing directors, thus creating the need to expand the pool of directors, with unseasoned new directors who have financial expertise but not necessarily

business expertise, or real estate expertise in the case of REITs. Still, as directors with industry expertise may be better monitors and advisors especially as REITs are financial companies and their growth and profitability rely on the acquisition and disposition of real assets, I hypothesize that:

H5: Real estate expertise of directors on REIT board committees is positively associated with REIT performance.

Since the SOX Act requires fully independent audit, compensation, and nominating/corporate governance committees, I can only test the relationship between the type of director and performance for non-mandatory committees such as investment and finance committees. From the agency theory standpoint, the independence of directors helps to ameliorate agency conflicts and therefore favors the monitoring role of directors, but may do so at the expense of their advisory role (Adams and Ferreira, 2007; 2009; Faleye et al., 2011; Cohen et al., 2013). Hence, I hypothesize that:

H6: REIT independence of directors on investment and finance committees is negatively associated with REIT performance.

The impact of women directors on firm performance is not conclusive. For example, for non-REITs, Adams and Ferreira (2009) find a negative relationship between the percentage of women directors on boards and performance while Carter et al. (2010) find no significant relationship between gender diversity and firm financial performance. For the case of non-REITs, Noguera (2020) finds a positive relationship between women directors and REIT performance only when the presence of women directors reaches a critical mass. In this paper, I focus on the impact of the presence of women directors on REIT committees and REIT performance because the boards operate mainly through committees and female representation is expected to be proportionally higher on such committees than on boards. Therefore, women directors are likely to have a more direct effect on firm performance. Consistent with this hypothesis, Green and Homroy (2018) find for a sample of large European companies that while female representation in boards has a modest positive impact on performance, there is a higher positive effect of female representation on audit, compensation, and nomination committees on performance.

However, U.S. boards have a smaller proportion of women directors than European boards, and female representation on the committees differs. Adams and Ferreira (2009) and Zhu et al. (2010) find that female directors in U.S. firms are over-represented in audit, nominating, and corporate governance committees, which are monitoring-related, but under-represented in compensation committees, even though empirical evidence shows that excessive CEO compensation can be mitigated by the presence of females on compensation committees (Bugeja et al, 2016). Also, gender diversity in audit committees has been found to improve the information environment in firms and more likely to demand higher audit quality (Buertey et al., 2024; Lai et al.,

2017). Overall, these results are consistent with the findings in Adams and Ferreira (2009) that female directors are more engaged and more stringent monitors, consistent with stronger governance, expected increased shareholder value, and support for gender diversity on boards and board committees. However, tough and unfriendly boards do not improve firm performance (Adams and Ferreira, 2007; 2009), and therefore the stringent monitoring of female directors may negatively affect their advisory role. The empirical evidence on the advisory input of women directors on board and committee operations is limited to their consistent positive impact on sustainability and corporate social responsibility issues (Boukattaya et al., 2024; Ginglinger and Raskopf, 2023; Mohy-ud-Din, 2023; Wasiuzzaman and Subramanian, 2023). Therefore, I hypothesize that:

H7: Gender diversity on REIT committees is positively associated with REIT performance.

Lastly, a long tenure on a board is expected to provide a director with important knowledge about the firm and its industry. However, long-term directors will likely become entrenched and less likely to monitor management (Huang and Hilary, 2018; Vafeas, 2003). Thus, I hypothesize that:

H8: The tenure of directors on REIT committees is negatively associated with REIT performance.

3. Sample and Methodology

3.1 Sample

The sample is composed of 31 S&P 500 REITs and 34 non-S&P 500 REITs for a total of 65 U.S. equity REITs. The data on the characteristics of the committees and directors are manually collected from proxies for the period of 2010 -2019.

3.2 Variables Description

All of the information that concern the board members of REITs and committee assignments was obtained from proxy statements. Among the information collected were the last name, gender, current occupation, appointment date as director, type of director (insider, outsider, or gray director), and committee memberships. I use dummy variables to code gender, type of director, and committee membership. I initially calculated the tenure of each director from the appointment date and then converted it to an interval scale. I followed the nine separate categories in Güner et al. (2008) to classify occupation and added

six separate real estate-related occupation categories³. The categories were later condensed into a binary classification of real estate expertise versus non-real estate expertise.

3.3 Methodology

3.3.1 REIT Committee Membership

Since the data are categorical, chi-square tests are performed in the initial tests of the hypotheses, and the following logistic regression model is used as a multivariate follow-up analysis. The equation for the probability that a director is assigned to a given committee given his/her characteristics can be expressed as follows:

Probability (Committee Assignment) =
$$1/(1 + e^{-Z})$$
 (1)

where the Z value is derived with:

$$Z = \beta_0 + \beta_1 REEXPERTISE + \beta_2 OUTSIDER + \beta_3 INSIDER + \beta_4 LONG TENURE + \beta_5 INTERM. TENURE + \beta_6 GENDER + \beta_7 MKTCAP + \beta_8 DEBT/TA + \beta_9 MKTTOBOOK + \beta_{10} FOCUS$$
 (2)

REEXPERTISE, a proxy for real estate expertise, is a dummy variable that equals one if the occupation is real estate related and zero otherwise. The type of director is included in the model as a three-level dummy variable with gray, a dummy variable that equals one if the director is a gray or not truly an independent director, and zero otherwise, as the reference variable. OUTSIDER is a dummy variable that equals one if the director is an outside (independent) director, and zero otherwise. INSIDER is a dummy variable that equals one if the director is an inside director, and zero otherwise. The tenure of directors is included in the model as a three-level dummy variable with short tenure, defined as a dummy variable that equals one if tenure on the board is five years or less, as the reference level. LONG TENURE is a dummy variable that equals one if the director has sat on the board for more than ten years and INTERM. TENURE is a dummy variable that equals one if the director has sat on the board between six and ten years. GENDER is a dummy variable that equals one if the director is male, and zero otherwise. MKTCAP is a proxy for size and calculated as the natural log of market capitalization, DEBT/TA is a proxy for leverage and calculated as debt over total assets, MKTTOBOOK is a proxy for growth, calculated as the ratio of the market value to book value of equity and FOCUS are indicator variables to control for REIT asset types.

³ The categories in Güner et al. (2008) for director occupations are commercial bank executive, investment bank executive, executive of a non-bank financial institution, finance executive, business professor, consultant, lawyer, noncorporate worker, and executive of a non-financial institution. I added the following real estate-related occupations to their list: current and former REIT CEO/chairman of the given REIT, current or former REIT CEO/chairman real estate consultant, real estate institutional investor, and other real estate professionals.

3.3.2 Composition and Performance of REIT Committees

To test the relationship between the characteristics of the directors on each committee and REIT performance, I perform the following fixed effects panel regression modeling:

ROA =
$$\beta_0$$
 + β_1 REEXPERTISE + β_2 OUTSIDER + β_3 INSIDER
+ β_4 TENURE + β 5FEMALE + β 6MKTCAP
+ β 7DEBT/TA + β 8MKTTOBOOK + ϵ (3)

Return on assets (ROA) is the ratio of funds from operations (the preferred measure of earnings for REITs) to total assets. To address endogeneity concerns between the composition and performance of the committees, ROA is calculated as a three-year geometric average. For example, the 3-year geometric average ROA for 2012 is the geometric average of the annual ROAs for 2011-2013. Real estate expertise (REEXPERTISE) is the percentage of real estate expertise per committee, OUTSIDER is the percentage of outside directors sitting in the given committee, INSIDER is the percentage of inside directors sitting in the given committee, and TENURE is the average tenure of the directors in the given committee, FEMALE is the percentage of women directors in the given committee, MKTCAP is a proxy for size and calculated as the natural log of market capitalization, DEBT/TA is a proxy for leverage and calculated as debt over total assets, and MKTTOBOOK is a proxy for growth, calculated as the ratio of the market value to book value of equity.

4. Results

4.1 Summary Statistics

Panel A in Table 1 shows that the profile of the average REIT director in the sample is an outside male director with below-average real estate expertise and a tenure of 10.8 years. The average REIT in the sample has a market capitalization of about 5.6 billion USD, a debt ratio of 57 percent, and a seven percent 3-year geometric average return on assets during the sample period. In Panel B of Table 1, the Pearson's correlation coefficients show a highly negative correlation between outside directors and real estate expertise which indicates that as more outside directors sit on the board, there is a decline in real estate expertise. There is also a negative correlation between inside and outside directors which is expected due to the increasing board independence resulting from the regulations. Finally, there is a positive relationship between inside directors and real estate expertise which suggests that inside directors bring significant real estate expertise to REIT boards. To rule out multicollinearity issues, I calculated the variance inflation factors (VIF). The average VIF is 1.29 and the highest is 1.93 thus suggesting that there are no multicollinearity problems in the data.

Panel A in Table 2 shows the descriptive statistics for S&P 500 and non-S&P 500 REITs while Panel B shows the results of chi-square tests on the differences in characteristics of directors between S&P 500 and non-S&P 500 REITs. There are more male directors, with longer tenures and more real estate expertise on the non-S&P 500 REITs compared to the S&P 500 REITs. Non-S&P 500 REIT boards are also less independent as they have around 21 percent of their members as grav directors and only 61 percent as outsiders, compared to 14 percent and 69 percent on S&P 500 REITs, respectively. S&P 500 REITs have fewer inside directors, but unlike Linck et al. (2008), who find statistically significant differences in insider presence between medium and large firms, the chi-square test for the relationship between insiders and S&P 500 and non-S&P 500 REITs is not statistically significant. Overall, these differences in the characteristics of directors between non-S&P 500 REITs and S&P 500 REITs are consistent with the findings in Adam (2003) in that board effort varies with firm characteristics. Boards of larger, growing, and older firms focus on monitoring management in which case the independence of directors matters more while boards of growing firms focus more on strategic issues, which results in higher demand for directors with longer tenure and more sector experience.

Table 1 Summary Statistics

Panel A: Summary Statistics for S&P 500 versus non-S&P 500 REITs

Variable	Mean	Median	S.D.	Min	Max
ROA (%)	7.387	5.951	11.939	-6.681	131.179
REEXPERTISE	0.386	0.000	0.487	0.000	1.000
OUTSIDER	0.650	1.000	0.477	0.000	1.000
INSIDER	0.177	0.000	0.382	0.000	1.000
TENURE	10.759	9.000	8.425	0.000	63.000
GENDER	0.854	1.000	0.353	0.000	1.000
MKTCAP	22.445	22.482	1.198	19.021	25.346
DEBT/TA	0.568	0.552	0.162	0.032	1.468
МКТТОВООК	10.184	1.987	222.134	-72.060	6256.000

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Panel B: Correlation Coefficients

Variable	1	2	3	4	5	6	7	8	9
1. ROA	1.000								
2. REEXPERTISE	0.005	1.000							
3. OUTSIDER	-0.040***	-0.418***	1.000						
4. INSIDER	-0.001	0.515***	-0.633***	1.000					
5. TENURE	0.001	0.155***	-0.249***	0.204***	1.000				
6. GENDER	0.008	0.142***	-0.177***	0.158***	0.212***	1.000			
7. MKTCAP	-0.015	-0.102***	0.064***	-0.035***	-0.045***	-0.125***	1.000		
8. DEBT/TA	0.013	-0.032**	-0.024*	0.023*	0.031**	0.014	0.007	1.000	
9.MKTTOBOOK	-0.004	-0.007	0.005	0.01	-0.01	0.014	-0.001	0.094***	1.000

Notes: S.D. denotes standard deviation. Sample summary statistics and Pearson's correlation coefficients among performance, committee composition, and REIT characteristics are presented. *, **, and *** denote significance at 10%, 5%, and 1%, respectively. N=5,544 director-years for all variables except ROA with N=5,517 director-years.

Panel A: Descriptive Statistics for S&P 500 versus non-S&P 500 REITs (N=5,544 Director-Years)

	S&P 50	00 REITs (N=	=2,618 Director	·-years)	Non-S&P 500 REITs (N=2,926 Director-years)				
Variable	Proportion	Std. Err.	Minimum	Maximum	Proportion	Std. Err.	Minimum	Maximum	
v ai iabic	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
REEXPERTISE	33.630	0.873	31.939	35.363	44.156	0.971	42.263	46.066	
OUTSIDER	68.694	0.857	66.990	70.350	60.963	0.953	59.078	62.815	
INSIDER	17.191	0.698	15.866	18.601	18.335	0.756	16.898	19.864	
GRAY	14.115	0.644	12.899	15.424	20.702	0.791	19.156	22.259	
SHORT TENURE	33.664	0.874	31.973	35.397	31.933	0.911	30.174	33.745	
INTERM. TENURE	23.103	0.779	21.611	24.666	20.435	0.788	18.934	22.024	
LONG TENURE	43.233	0.916	41.447	45.037	47.632	0.976	45.723	49.548	
GENDER	81.955	0.711	80.519	83.307	89.267	0.605	88.022	90.396	

Panel B: Differences in Characteristics between S&P 500 and non-S&P500 REIT Directors

REIT	Expertise		Type			Gender			Tenure in years				
	REEXPERTISE	χ^2	OUTSIDER	INSIDER	Gray	χ^2	Male	Female	χ^2	0-5	6-10	>10	χ^2
S&P 500 REIT	984	0.000***	2,010	503	414	0.000***	2,398	528	0.000***	985	676	1,265 (0.003***
Non-S&P 500 REIT	1,156		1,596	480	541		2,337	281		836	535	1,247	

Notes: Panel A presents the descriptive statistics for S&P 500 REITS and a sample of non-S&P 500 REITs, separately, for the 2010-2019 period. Panel B shows the differences between S&P 500 and non-S&P500 REITs regarding the characteristics of directors. *** shows statistical significance for chi-square tests at the 1% level.

4.2 Composition of REIT Committees

Table 3 shows the results of chi-square tests on directorial characteristics per committee for all the REITs in the sample.

Cross tabulations for real estate expertise are strongly significant and indicate that most directors sitting in audit, compensation, nominating/governance, and finance committees lack real estate expertise, which strongly supports H1 but contradicts previous empirical evidence that having relevant industry expertise enhances the ability of outside directors to monitor (Wang et al., 2015). The chi-square test is not statistically significant in the case of investment committees.

Cross-tabulations for the type of director (inside versus outside directors) on audit, compensation, and nominating/governance committees confirm that they are composed of outside directors only. Finance committees are also mainly composed of outsiders while no statistical significance is found in the case of investment committees. Except for the case of investment committees, these results strongly support H2 that there will be disproportionally more outside than inside and gray directors on monitoring and advisory committees.

Cross tabulations for the gender of directors versus committee memberships are strongly significant for all but finance committees and indicate that most directors sitting on audit, compensation, nominating/governance, and investment committees are male. Female membership is the highest in nominating/governance committees, followed by audit and compensation committees, with the lowest in investment committees, which is evidence that female directors are severely underrepresented in investment committees. These results strongly support H3 that all committees have more male directors.

Cross tabulations for the tenure of directors for monitoring committees are strongly significant and show that most directors have either long tenures (10 years or more) or short tenures (five years or less). In the case of audit committees, the tenure of directors is almost evenly split between those with short and long tenures while most of the directors have longer tenures in the case of nominating/governance and compensation committees. Differences in the length of tenure are not found for directors in finance committees. The tenure of directors in investment committees is mostly long or short, with fewer intermediate tenures. These results do not support H4 that investment committees have more directors with a longer tenure than audit, compensation, nominating/governance, and finance committees.

Table 4 shows the differences in the chi-square tests on directorial characteristics by gender for all of the REITs in the sample. The results confirm that male directors largely outnumber female directors, especially in the case of investment committees, followed by monitoring committees as a group and finance committees. All of the monitoring committees show that female

directors are mainly outside directors, with less real estate expertise, and shorter tenures than the male directors. In the finance committees, all of the female directors in the sample are outsiders and have almost the same level of real estate expertise as the male directors who have real estate expertise but shorter tenures. In the investment committees, female directors are mainly outside directors, have significantly less real estate expertise than their male counterparts, and shorter tenures. Overall, these results are consistent with the recent increasing inclusion of women directors on REIT boards, which explains their shorter tenures and low expertise in real estate.

Overall, Tables 3 and 4 show that, as in the case of non-REIT directors, most REIT directors are male and outsiders. However, unlike non-REIT directors whose occupation is business related and have long tenures (Kesner, 1988), most of the REIT directors may have business experience but lack real estate expertise and have either short or long tenures in their committees. These findings for REIT directors are partially consistent with those of Adams et al. (2021), who find that the percentage of outside directors on committees increases from 82 to 97 percent after the enactment of the SOX Act and that their tenure is on average about seven years.

Although the chi-square tests provide an accurate picture of the composition of the monitoring and advisory committees in terms of the characteristics of the directors, this type of univariate analysis does not allow for testing the interaction between the variables of the characteristics of directors. Therefore, I conduct panel logistic regression modeling of the relationship between committee membership and real estate expertise, type of director, tenure, and gender, and the results are shown in Table 5. The variables for type of director (OUTSIDER, INSIDER) are included only in the analyses of the finance and investment committees as audit, compensation, and nominating, and governance committees can only have outside directors as members. For the audit committee, it is found that holding all other predictor variables constant, the odds of a director being a member of the audit committee is reduced by 87 percent for directors who have real estate expertise compared to those without real estate expertise. Also, the odds of directors with long and intermediate tenures sitting on the audit committees are 70 percent and 56 percent lower, respectively, than directors with shorter tenures. Finally, the odds of a male director being a member of the audit committee is decreased by 98 percent for missing text directors compared to female directors. All these findings indicate that the average audit director is an outsider female director with little real estate expertise and a short tenure which is consistent with H1 to H3 and the findings in Lee (2020) of firms assigning new outside directors to the audit committee if they are financially literate with the purpose of such directors gaining a better understanding of the operations and reporting methods of the firm. These results are also consistent with the findings in Vafeas (2003) on participation in audit committees being independent of tenure, thus suggesting that the audit committee is mainly considered a compliance committee.

Table 3 Committee Membership of REITs by Directorial Characteristics

Committee Membership		Experti	ise		Type			Tenure	(in yea	rs)		Gende	r
•	Real Estate	Non-Real Estate	χ^2	OUT- SIDER	INSI- DER	χ^2	0-5	6-10	>10	χ^2	Male	Female	χ^2
Audit committee (N=5,544)													
Member Non-member	543 1,597	1,766 1,638	379.86***	1,967 1,639	0 983	961.67***	868 953	567 644	874 1,638	89.04***	1,903 2,832	406 403	28.40***
Compensation	commit	tee (N=5,5	44)										
Member Non-member	555 1,585	1,765 1,639	362.65***	1,965 1,641	0 983	952.70***	735 1086	584 627	1,001 1,511	26.01***	1,937 2,789	374 435	7.48***
Nominating/go	vernanc	ce committe	ee (N=5,544)										
Member Non-member	603 1,537	1,830 1,574	349.20***	1,975 1,631	0 983	941.03***	753 1,068	603 608	1,077 1,435	22.96***	1,973 2,762	460 349	64.75***
Finance commi	ittee (N=	=620)											
Member Non-member	85 124	206 205	4.97**	236 258	22 49	11.16***	121 126	76 82	94 121	1.40	235 279	56 50	1.78
Investment con	Investment committee (N=1,586)												
Member Non-member	369 274	509 434	1.8	585 476	140 108	0.14	280 312	213 151	385 245	25.47***	779 583	99 125	13.15***

Notes: N varies depending on whether a REIT has finance and investment committees. *** and ** denote statistical significance for chi-square tests at the 1% and 5% levels, respectively.

Table 4 Directorial Characteristics of REITs by Gender for Each Committee

Panel A: Audit, Compensation, and Nominating/governance Committees (N=5,544)

Directorial Characteristic	Male	Female	χ^2	p-value
Expertise				
Real estate expertise	1,963	177	111.75***	0
No real estate expertise	2,772	632		
Type of director				
OUTSIDER	2,915	691	192.87***	0
INSIDER	958	25		
Tenure				
0-5 years	1,383	438	243.29***	0
6-10 years	1,020	191		
>10 years	2,332	180		

Panel B: Finance Committees (N=620)

Directorial Characteristic	Male	Female	χ^2	p-value
Expertise				
Real estate expertise	172	37	0.08***	0.775
No real estate expertise	342	69		
Type of director				
OUTSIDER	388	106	32.61***	0
INSIDER	71	0		
Tenure				
0-5 years	183	64	26.53***	0
6-10 years	133	25		
>10 years	198	17		

Panel C: Investment Committees (N=1,586)

Directorial Characteristic	Male	Female	χ^2	p-value
Expertise				
Real estate expertise	565	78	3.54*	0
No real estate expertise	797	146		
Type of director				
OUTSIDER	866	195	47.88***	0
INSIDER	236	12		
Tenure				
0-5 years	462	130	48.93***	0
6-10 years	324	40		
>10 years	576	54		

Notes: N varies depending on whether a REIT has finance and investment committees. *** and * denote statistical significance at the 1% and 10% levels, respectively.

Table 5 Panel Logistic Regression Analyses on REIT Committee Membership

		Board Committee								
Variable	Audit (Compensatio	on Nominating/governance	Finance	Investment					
	N=5,544	N=5,544	N=5,544	N=620	N=1,586					
CONSTANT	12.34**	2.90	-0.94	16.33	12.77					
REEXPER-	-2.03	-2.03	-2.53	-2.96	-2.34					
TISE	(0.13)***	(0.13)*	(0.08)***	(0.05)*	(0.10)***					
OUTSIDER	,	,	,	-2.32	0.66					
				(0.10)	(1.94)					
INSIDER				-6.37	2.00					
				(0.00)**	(7.36)**					
INTERM.	-0.82	0.61	0.66	-2.19	-0.64					
TENURE	(0.44)***	(1.83)*	(1.94)**	(0.11)**	(0.53)					
LONG	-1.20	0.32	0.64	-3.39	0.43					
TENURE	(0.30)***	(1.37)	(1.89)	(0.03)***	(1.53)					
GENDER	-3.97	-1.01	-1.98	-1.89	3.01					
	(0.02)***	(0.37)	(0.14)	(0.15)	(20.24)**					
ROA	0.23	0.19	0.11	-1.51	-0.18					
	(1.26)*	(1.21)*	(1.12)***	(0.22)	(0.84)					
MKTCAP	-0.43	-0.20	0.10	-0.42	-0.54					
	(0.65)*	(0.82)	(1.11)	(0.66)	(0.58)					
DEBT/TA	-2.48	0.14	-0.61	-2.77	-2.48					
	(0.08)	(1.15)	(0.54)	(0.06)	(0.08)					
МКТТОВООК	-0.00	0.00	-0.00	0.02	0.52					
	(1.00)	(1.00)	(1.00)	(1.02)	(1.69)*					
INFRA	-1.02	-1.35	-1.09	1.03	-2.73					
	(0.36)	(0.26)	(0.34)	(2.80)	(0.06)					
RESID	0.39	-0.65	0.27	6.02	1.55					
	(1.48)	(0.52)	(1.31)	(411.43)	(4.70)					
OFFICE	-2.41	-1.02	-0.74	-1.83	-3.30					
	(0.09)	(0.36)	(0.48)	(0.16)	(0.04)					
HOTEL	-0.71	0.70	1.24	-0.26	-0.25					
	(0.49)	(2.02)	(3.47)	(0.77)	(0.78)					
RETAIL	-0.18	-0.49	0.39	` /	2.27					
	(0.83)	(0.61)	(1.48)		(9.69)					
IND	-1.72	-1.30	-2.02		-2.53					
	(0.18)	(0.27)	(0.13)		(0.08)					
MIXED	-1.26	-0.91	-1.30	-0.34	` ′					
	(0.28)	(0.40)	(0.27)	(0.71)						
HC	-1.56	-1.03	-1.56	` /	1.01					
	(0.21)	(0.36)	(0.21)		(2.74)					
Pearson χ ²	3,096.16	3,059.02	3,201.84	382.56	1207.65*					
Hosmer-	34.88***	30.85***	14.59*	15.32*	15.13*					
Lemeshow χ ²										

Notes: INFRA, RESID, OFFICE, HOTEL, RETAIL, IND, MIXED, and HC are the property focus dummy variables. INFRA equals one if a REIT is classified as a data center or infrastructure REIT, and zero otherwise. RESID are multifamily REITs, and zero otherwise. Office are office REITs, and zero otherwise. HOTEL are hotel REITs, and zero otherwise. Retail are shopping centers, regional malls, or any REIT classified as retail, and zero otherwise. IND are industrial REITs, and zero otherwise. MIXED are specialty, diversified, or

timberland REITs, and zero otherwise. HC are health care REITs, and zero otherwise. Coefficients (odds ratios) are shown in the table. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels respectively.

the compensation committee, the only statistically significant characteristics are real estate expertise of the directors and intermediate tenure. Specifically, it is found that the odds of a director sitting on this committee is reduced by 87 percent for those who have real estate expertise compared to those without real estate expertise. Directors with intermediate tenures between 6 and 10 years have 1.8 times the chance of sitting on compensation committees. In other words, compensation committee directors on average have little real estate expertise but have been on their boards for a while. For the nominating/governance committees, the odds of a director sitting on this committee are reduced by 92 percent for those who have real estate expertise compared to those without real estate expertise. Also, the odds of directors with intermediate tenures sitting on nominating/governance committees are almost two times higher than those with shorter tenures. Overall, the results indicate that directors sitting on compensation and nominating/governance committees have little real estate expertise (which is consistent with H1) and their gender does not seem to matter for their membership in these committees while having an intermediate tenure does matter. This is consistent with the findings in Lee (2020) that as directors accumulate more experience within their firms, the firms delegate more compensation and nominating/governance-related duties to such directors. It is also consistent with the findings in Vafeas (2003) that the likelihood that directors are assigned compensation and nominating/governance committees increases with board tenure.

For finance committees, it is found that the odds of a director who sits on this committee are reduced by 95 percent for those with real estate expertise compared to those without the expertise. The odds of an insider sitting on the finance committees are zero and lower for those with long and intermediate tenures by 97 percent and 89 percent, respectively, compared to directors with shorter tenures. Gender is found to be a statistically insignificant characteristic. This means that the average finance director is either a male or female outsider with little real estate expertise and a short tenure. This is consistent with the findings that finance committees attract mobile financial experts (CFOs, treasurers, financial analysts) from many industries (Trentmann, 2022), which results in REIT boards populated with finance directors with little real estate expertise and short tenures.

For investment committees, it is found that the odds of a director on this committee is reduced by 90 percent for those who have real estate expertise compared to those without the expertise. However, the odds of an insider sitting on investment committees are more than 7 times (700 percent) higher than those of gray directors. Also, the odds of male directors sitting on investment committees are 20 (2,000 percent) times higher compared to female directors.

Overall, I find a negative relation between real estate expertise of directors and REIT committee membership. I also find that a longer tenure is associated with nominating/governance and compensation committees only, that inside directors most likely sit on investment rather than finance committees, and the membership of male directors is more likely in investment committees than audit committees which is partial evidence of the allocation of female directors in monitoring rather than advisory committees.

Next, I explore if the interaction between the type of director and real estate expertise matters for committee membership. Table 6 shows the results of the panel logistic regression modeling on the interaction between real estate expertise and type of director for the finance and investment committees. The interaction between real estate expertise and outside directors is statistically insignificant for finance committees while that between real estate expertise and insiders could not be estimated as all insiders on the finance committees have real estate expertise. Like the results shown in Table 5, the odds of sitting on the finance committees are lower by 96 and 89 percent for directors with long and intermediate tenures, respectively, compared to those with shorter tenures. In the case of investment committees, the interaction between real estate expertise and outside directors is also statistically insignificant. While the interaction between real estate expertise and inside directors is statistically significant, the odds of an insider with real estate expertise sitting on an investment committee are zero. However, the odds of insiders 4 sitting on investment committees, regardless of real estate expertise, are 369 times higher than that of the gray directors. The odds of a director sitting on this committee are reduced by 94 percent for those who have real estate expertise compared to those without real estate expertise. Also, the odds of a male director sitting on an investment committee are 57 times higher than that of a female director, and the odds of directors with intermediate tenures are 54 percent lower compared to those with shorter tenures. These results are largely consistent with the results shown in Table 5 and do not support the hypothesis that inside or outside directors with real estate expertise are more likely to be members of REIT finance and investment committees.

⁴ This finding is consistent with an unreported chi-square analysis that shows that most insiders have real estate expertise.

Table 6 Impact of Real Estate Expertise on Membership in Finance and Investment Committees

Directorial Characteristic	Finance committee	Investment committee		
	N=620	N=1,586		
CONSTANT	13.51	10.22		
REEXPERTISE	-4.29	-2.84		
	(0.01)	(0.06)**		
OUTSIDER	-3.98	-0.06		
	(0.02)	(0.94)		
INSIDER	-4.65	5.91		
	(0.01)	(368.94)**		
REEXPERTISE * OUTSIDER	1.84	1.93		
	(6.28)	(6.91)		
REEXPERTISE * INSIDER	(0.20)	-6.27		
		(0.00)**		
LONG TENURE	-3.19	0.65		
Esta iEraile	(0.04)***	(1.92)		
INTERM. TENURE	-2.21	-0.77		
INTERIOR TENORE	(0.11)***	(0.46)*		
GENDER	-0.73	4.04		
GENDER	(.48)	(56.75)***		
ROA	-1.62	-0.16		
1071	(0.20)	(0.86)		
MKTCAP	-0.33	-0.45		
	(0.72)	(0.64)		
DEBT/TA	-1.86	-2.93		
DED1/1A	(0.16)	(0.05)		
MKTTOBOOK	0.00	0.53		
WIKTTOBOOK	(1.00)	(1.69)*		
INFRA	0.02	-1.74		
INTRA	(1.02)	(0.17)		
RESID	6.62	1.93		
KESID	(753.60)***	(6.86)		
OFFICE	-1.81	-6.60		
OFFICE	(0.16)	(0.00)***		
HOTEL	-2.06	0.32		
ITOTEL	(0.13)	(1.37)		
RETAIL	(0.13)	-0.94		
KETAIL		(0.39)		
IND		-2.52		
		(0.08)		
MIXED	-0.98	(0.08)		
IMIAED	(0.38)			
HC	(0.38)	0.97		
D	201 01	(2.65)		
Pearson χ ²	381.81	1,210.30		
Hosmer-Lemeshow χ ²	15.74**	38.82***		

Notes: INFRA, RESID, OFFICE, HOTEL, RETAIL, IND, MIXED, and HC are the property focus dummy variables. INFRA equals one if a REIT is classified as a data center or infrastructure REIT, and zero otherwise. RESID are multi-family REITs, and zero otherwise. OFFICE are office REITs, and zero otherwise. HOTEL are hotel REITs, and zero otherwise. RETAIL are shopping centers, regional malls, or any REIT classified as retail, and zero otherwise. IND are industrial REITs, and zero otherwise. MIXED are specialty, diversified, or timberland REITs, and zero otherwise. HC are health care REITs, and zero otherwise. Coefficients (odds ratios) are shown in the table. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

4.3 Composition and Performance of REIT Committees

The question of who should sit on board committees can be answered by assessing the impact of the characteristics of the committee directors on performance as an optimal board structure should translate into greater board effectiveness and result in better firm performance.

The results of the fixed effects panel regressions are shown in Table 7. Real estate expertise is associated with performance for all committees, but only positively associated with performance for the audit, nominating/corporate governance, and investment committees which is consistent with H5. The negative relationship between real estate expertise of directors in the compensation and finance committees and REIT performance suggests that real estate expertise is less relevant for the functioning of these committees and could be better allocated to other committees.

Consistent with H6, I find that board independence, measured by the percentage of outside directors sitting on the finance and investment committees, is negatively related to performance, which supports the idea that advisory committees are best served by having insiders.

I find partial support for H7 as I find that gender diversity is positively associated with performance in most committees; namely, the compensation, nominating/corporate governance, and investment committees. These findings support the need for gender diversity not only at the board level but throughout the monitoring and advisory committees.

Finally, partially supporting H8, long tenure in compensation and nominating/corporate governance committees is negatively associated with performance. These results are consistent with the findings in Huang and Hilary (2018) that tenure exhibits a U-inverted relationship with performance which means that while some board tenure is desirable at some point, the entrenchment of directors hurts performance.

Overall, these results reveal the impact of incompatible appointment of directors to REIT committees on REIT performance and suggest that allocating

directors with certain characteristics to each committee could improve performance. For example, reducing the tenure of directors in compensation and nominating committees or having tenure-diverse committees for better management monitoring, as recommended in Li and Wahid (2018), could prevent the entrenchment of directors, and enhance performance. Also, allocating women directors with real estate expertise, especially those who are inside directors, to investment committees could improve REIT performance.

Table 7 Multivariate Analysis on Impact of Board Committee Composition on REIT Performance

	Audit	Compensation	Nominating/CG	Finance	Investment
INTERCEPT	30.029	24.126	10.640	-4.269	30.826
	(3.77)***	(3.00)***	(1.54)	(-0.86)	(2.27)**
REEXPER-	0.048		0.123	-0.092	0.168
TISE	(3.17)***	(-4.75)***	(6.86)***	(-9.19)***	(5.19)***
OUTSIDER				-0.051	-0.055
				(-7.48)***	(-1.73)*
INSIDER				-0.129	0.514
				(-7.46)***	(5.07)***
TENURE	0.000	-0.003	-0.003	0.000	0.002
	(0.36)	(-4.65)***	(-4.76)***	(1.16)	(0.60)
FEMALE	0.004	0.027	0.038		0.000
	(0.52)	(2.35)**	(3.85)***		(2.98)**
MKTCAP	-1.493	-0.904	-0.644	1.178	-2.143
	(-3.80)***	(-2.43)**	(-1.92)*	(5.06)***	(-3.47)***
DEBT/TA	9.331	10.658	9.364	-13.822	16.928
	(3.98)***	(4.55)***	(4.10)***	(-10.32)***	(1.82)*
MKTTOBO	-0.000	-0.000	-0.000	0.653	-0.396
OK	(-6.72)***	(-7.65)***	(-5.15)***	(11.77)***	(-1.45)
			. ,		
R-Square	0.361	0.369	0.380	0.753	0.442
Observations	5,517	5,517	5,517	620	1,586

Notes: Heteroscedasticity and autocorrelation-corrected t-statistics are shown in parenthesis. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

5. Conclusions and Discussion

I examine the profile of the audit, compensation, nominating/governance, finance, and investment committee members of REITs as far as real estate expertise, type of director, gender, and tenure are concerned. I find that most REIT directors are not real estate experts. I also find that directors on monitoring committees are outsiders with those who have intermediate tenure disproportionally sitting on governance/nominating committees and those with shorter tenures sitting as members of the audit committees. Monitoring committee members are mainly male directors but with a higher and

increasingly female representation. The number of women appointed to publicly traded U.S. REIT boards has more than doubled during the study period. Most of these women directors are younger, with less experience and shorter tenure than their male counterparts (FPL Associates Ferguson Partners, 2019). This is consistent with the findings in this study of female directors being disproportionally more likely to be outside directors without real estate expertise, with short tenures, and more prevalently found on monitoring and finance committees than investment committees.

I also find that the finance and investment committees are staffed with directors with very different characteristics despite both being function-related advisory committees. The profile of the average finance committee director is rather like the profile of those on monitoring committees: an outside male (most likely) or female director with no real estate expertise and a short tenure on the board. In contrast, the type and gender of the director appear to greatly matter to qualify as an investment committee member as inside and male directors are found to be more likely members of the investment committees of REITs. This is consistent with the findings in Noguera (2023) in that a large number of insiders on investment committees improve REIT performance.

I also find that the characteristics of directors vary by REIT size. S&P 500 REIT committees have relatively more female directors and are composed mainly of outsiders with shorter or intermediate tenures and a lack of real estate expertise. In contrast, non-S&P 500 REIT committees have a higher relative presence of gray and inside directors and more real estate expertise than their S&P 500 counterparts. This is consistent with the hypothesis that the efforts of boards vary with firm characteristics and the internal contingencies of firms, such as company size and phase of life cycle in addition to external contingencies such as industry type and legal requirements (Adams, 2003, Zahra and Pearce, 1989).

Finally, I examine the relationship between the characteristics of directors on committees and REIT performance. I find that directors with real estate expertise are allocated to audit, nominating/corporate governance, and investment committees which improves performance while members with real estate expertise on compensation and finance committees negatively affect performance. I also find that the presence of outside directors on advisory committees hurts performance. Directors with long tenure on compensation and nominating/corporate governance committees, which are both monitoring committees, also hurt performance while the presence of women directors on these committees increases performance. Overall, these results suggest there is an optimal composition for REIT committees.

The limitation of my study is the focus on a single industry. Consequently, it is not clear whether my results can be generalized to non-REIT companies. In addition, despite a thorough data collection process, there is the potential for mistakes due to the manual collection of the data. Overall, however, this study contributes to a still largely unexplored strand of research that examines the

functioning of boards by focusing on the structure and composition of board committees which is expected to have implications for firm performance and policy setters, especially regarding environmental, social and governance (ESG) concerns.

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