

Long-Tenured Independent Directors and Firm Performance^{*}

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Agency perspectives suggest long-tenured independent directors (LTIDs) may be cronies of the CEO, making their boards less effective, but we theorize that LTIDs may have particular expertise and motivation to improve board effectiveness and ultimately firm performance. We find strong support for this prediction using 15 years of data on the S&P 1,500 firms and an instrument based on director age at time of hire. We also find that an LTID adds more value to firms that are complex or mature, had more CEOs during the LTID's tenure, and have less entrenched management. Post-hoc analyses of director deaths and shareholder class action lawsuits and activist motions provide additional evidence that LTIDs add value to the firms on whose boards they serve.

1. INTRODUCTION

Corporate boards have been the subject of a vast and growing literature across the business disciplines and the social sciences. In general, management theory holds that boards serve two functions: (a) monitoring top management to ensure that the interests of shareholders are protected and (b) providing resources (broadly defined) to assist top managers in making good decisions (Berle & Means, 1932; Hillman & Dalziel, 2003; Jensen & Meckling, 1976; Pfeffer & Salancik, 1978), although these two functions may often overlap in practice.

Within this multidisciplinary literature, the agency perspective has long had great influence, especially in economics and related fields like finance and accounting. According to this view, top managers must be closely monitored lest they act in ways that benefit themselves and harm their firms (Jensen & Meckling, 1976). This perspective suggests that having long-tenured independent board directors (LTIDs) may be problematic. As the tenures of board members grow, they could become too friendly with the CEO, impairing their ability to monitor the CEO impartially. It follows that a firm should have term limits to keep boards fresh (Hambrick, Misangyi, & Park, 2015: 340; Hillman, Shropshire, Certo, Dalton, & Dalton, 2011; Lipton & Lorsch, 1992). Some practitioners seem to agree. The California Public Employees' Retirement System has said that directors who serve over 12 years may be compromised, State Street Advisors has reportedly voted against hundreds of directors per year out of tenure concerns (Francis & Lublin, 2016), and some firms have established targets for average tenure (e.g., Microsoft) (SpencerStuart, 2019: 18). Some regulators also seem to agree. After the financial scandals of the 2000s, some countries began mandating maximum terms for board directors, requiring an explanation for long tenures, or reclassifying directors as non-independent after a certain number of years (e.g., France, Hong Kong, South Africa, Spain).

And yet, although this agency perspective has greatly influenced board research in management, the management literature offers a more nuanced view. In particular, scholars have argued that a director's social and psychological identification with her firm may grow with her tenure on the board,

motivating her to make more effort at resource provision and monitoring, not less (Hillman, Nicholson, & Shropshire, 2008). Some practitioners have echoed these sentiments in pushing back against term limits, arguing, *inter alia*, that more experienced board members are more effective advisers and have the institutional standing to stand up to management (Francis & Lublin, 2016; Pozen & Hamacher, 2015).

Making these contradictory perspectives especially problematic for both practice and theory is a little-known related fact about corporate governance: Many firms do in fact have a small number of very long-tenured independent directors on their boards, usually only one; for example, over a quarter of independent directors in the Russell 3,000 firms have continuously served in the same firm for 12 years or more, a number that has been stable for years (Papadopoulos, 2018). We find that approximately half (depending on the year) of the firms in our sample (the S&P 1,500 firms, excluding financial firms and utilities) have an independent board director with tenure of 15 years or more, but that in the majority of cases, such extended tenures are limited to a single person and rarely more than two. From a practical point of view, stakeholders need to know whether these LTIDs are detracting from firm performance (by shielding the CEO from proper oversight) or enhancing firm performance (by using their firm-specific knowledge and status to improve monitoring of, and resource provision to, the CEO). For theory, understanding the impact of LTIDs would deepen our understanding of how and when individual director characteristics affect how the board serves its monitoring and resource provision functions and through which underlying mechanisms.

Yet, the research to date is surprisingly silent on how to regard the institution of a very-long-tenured director and has produced inconsistent results about the impact of board tenure, more generally. To wit, the *average* tenure of independent directors has been found to have both an inverse U-shaped relationship (Huang & Hilary, 2018) and a negative relationship (Kor & Sundaramurthy, 2009) with firm performance. With regard to the mechanisms by which board tenure may affect performance, the average tenure of independent directors has been found to have a negative relationship with paying greenmail (Kosnik, 1990), no relationship with the likelihood of restructuring (Johnson, Hoskisson, & Hitt, 1993), having a poison pill (Mallette & Fowler, 1992), or adopting a classified board (Sundaramurthy, Rechner,

& Wang, 1996), whereas yet other work has documented non-linear effects between tenure and strategic change (Golden & Zajac, 2001), and board deliberations on corporate reputation (Musteen, Datta, & Kemmerer, 2010) and entrepreneurial issues (Tuggle, Schnatterly, & Johnson, 2010).

We argue that the confusion may in part arise because this research, like most research on boards, has focused on aggregate measures, in this case *average* tenure of independent directors, while neglecting their individual characteristics (Hambrick *et al.*, 2015: 328; Withers, Hillman, & Cannella Jr, 2012: 247-8). Yet, scholars have long recognized that the attributes of individual directors matter and called for more research on them (Finkelstein & Hambrick, 1996; Hillman, Cannella Jr, & Paetzold, 2000; Hillman *et al.*, 2008) because “just one” director with the right attributes may be more predictive than “customary board descriptors” (Hambrick *et al.*, 2015: 323). Indeed, in one of the few studies of individual directors, Brown, Anderson, Salas, and Ward (2017) find that the market reacts most adversely to the deaths of directors of intermediate tenure, suggesting that individual directors do matter.

In this paper, we respond to these calls—and seek to bring theoretical and empirical clarity to our understanding of the relationship between board tenure and firm performance—by developing and testing a theory of how *individual* LTIDs add value to the firms on whose boards they serve. We also bring an important—but little known—empirical fact to the attention of the large community of scholars studying governance, namely that many firms have a small number of long-serving independent directors.

We theorize that, as a result of the LTID’s long tenure on a firm’s board, she may develop the firm-specific knowledge and experience, as well as the concomitant status, to monitor and assist senior management effectively. Moreover, the LTID’s strong self-identification with her firm (van Knippenberg, 2000) and tendency to view herself as the CEO’s strategic partner (Boivie, Withers, Graffin, & Corley, 2021) should motivate her to use this firm-specific experience and knowledge on behalf of shareholders and other stakeholders. Any liability associated with her long board tenure, meanwhile, is offset by the other members of the board, who generally have much shorter tenures. The implication is that having an LTID should lead to better firm performance. We find strong support for this theoretical perspective in our main analysis, which uses the age at hire of the longest-serving independent director as an instrument

for the presence of an LTID. This result is robust to different measures of firm performance and LTID status, as well as to different econometric specifications.

We then explore the mechanisms underlying our main result by considering moderators. If an LTID is motivated to add value through her firm-specific experience, knowledge, and status, one would expect her added value to be greater if a firm has complex operations (making her advice more useful) or is mature (making her experience more relevant), or if she has served with more CEOs at the firm (implying, *inter alia*, less redundancy with the CEO's own firm-specific knowledge). This is exactly what we find. Conversely, if the CEO is entrenched, an LTID may have less ability to influence the CEO and, perhaps due to cronyism, less motivation to do so, implying a weaker relationship between the presence of the LTID and firm performance; again, this is what we find. Second, we undertake post-hoc analyses. We find that the stock market reaction to the death of a firm's longest-serving independent director, which is in principle exogenous, is more negative if the director is an LTID. This result bolsters the claim that having an LTID causes better firm performance. Then, we demonstrate that the presence of an LTID is associated with fewer shareholder class action lawsuits and activist motions, both of which are associated in the literature with poor firm governance, including by the board.

2. LONG-TENURED INDEPENDENT DIRECTORS: THE PHENOMENON

Before developing our theoretical perspective, it is important to discuss the phenomenon, because it is rarely discussed in either the academic or practitioner literature. Indeed, the practitioner literature does not have a consistent definition of long tenure. For instance, Institutional Shareholder Services (2019: 38) uses nine or more years in the USA but more or fewer years elsewhere, depending on local practices and preferences. In the USA, moreover, 5% of S&P 500 firms have board tenure maximums, ranging from 10 to 20 years (SpencerStuart, 2019), implying lack of consensus about how long is long.

As described below, we collected data by hand and from commonly-used databases on the boards of firms in the S&P 1,500 over a 15-year period from 1998 to 2012. Because there is no consensus on how long a tenure is "long," we define a long-tenured independent director (LTID) as one with tenure of

15 years or more, coinciding closely with both the mean and median tenure of the longest-serving independent board member of the firms in our data. By comparison, the mean tenure for all independent directors is about 8 years (median slightly lower). The mean (median) age of LTIDs is about 67 (68) years old versus 61 (62) for all independent directors.

Comparing Firms with & without LTIDs

Using this definition of LTID, we form two homogenous groups of firms in our data, (a) LTID firms, which have an LTID every year in the sample period,¹ and (b) non-LTID firms, which never do. The results of this exercise are depicted in Table 1.

Insert Table 1 about here

In general, the boards of LTID and non-LTID firms are similar, but the differences are important. In particular, boards at LTID firms are slightly larger (9.62 vs. 8.56, $p < 0.01$) and older (62.51 vs. 60.00, $p < 0.01$). LTID boards are equally likely to include a gray² director (0.94 vs 0.94, $p = 0.90$) but have more independent directors (7.01 vs. 6.00, $p < 0.01$). Independent directors are associated with less entrenchment, so their greater representation on the boards of LTID firms indicates that the LTID phenomenon is *not* associated with board entrenchment. Likewise, the average LTID serves almost two CEOs (and occasionally up to seven), suggesting LTIDs are not indicative of CEO entrenchment or overly close to their CEOs, albeit CEO tenure is somewhat longer at LTID firms (8.14 vs. 6.59, $p < 0.01$).

¹ We allow a six-month grace period because we found several cases of directors that apparently leave the board only to rejoin a few months later. We manually inspected these cases and found that they are due to (1) transient personal reasons, mostly health-related, (2) apparently “strategic” interruptions to artificially reduce outside directors’ average tenure, and (3) noise in the data collection process.

² Directors are defined as gray following the ISS (formerly RiskMetrics) classification process. ISS identifies gray directors based on proxy statements and disclosures of related transactions. Examples include executives of professional service providers, customers, suppliers, former employees of the firm or subsidiaries, directors designated by a significant shareholder or group (such as a union), majority holders, family members of executives, recipients of a gift from the firm, and interlocking directors (a director and executive of the sample firm sits on another board that has a director and executive who also sits on the sample firm’s board).

Prevalence of LTIDs

The median number of LTIDs across all firms is one and the mean is only 0.90. In general, firms do not have many LTIDs, with about half having zero, a quarter having only one, and about 15% having two vis-à-vis an average board size of ten. A single LTID would not raise average board tenure much, so using average tenure, as most research on board tenure has done, does not capture the LTID phenomenon.

Characteristics of LTIDs

If one has a cynical view of LTIDs as CEO cronies, one might expect them to be less qualified than other independent directors. We find the opposite. Table 2 reports a comparison of LTIDs with other independent directors. LTIDs are less likely to have a business degree, but they are more likely to have graduated from an Ivy League school, have a law degree, and have a PhD. Thus, overall, LTIDs have greater educational attainment than other independent directors.

Insert Table 2 about here

LTIDs do have small director networks (as defined by BoardEx, which looks at overlaps in employment, education, etc.). Does that mean that LTIDs have inadequate exposure to other companies? Not exactly. Using 2012 as a representative year and the average number of outside board seats other independent directors have as a baseline, Figure 1 graphs how many more or fewer outside board seats the average LTID had over the course of her tenure at her firm in the years leading up to 2012. (In the early years of her tenure, she would not have been classified as an LTID.) Figure 1 shows a clear pattern wherein LTIDs have more outside boards seats than other independent directors in their early years on the board and then fewer in later years when they specialize in the firms on which they are an LTID.

Insert Figure 1 about here

Finally, in the wake of corporate scandals in the early 2000s, several regulatory changes were enacted to separate executive and independent board members. Firms have responded in several ways, including the election of a lead independent director who has some explicit and sometimes powerful responsibilities. Recent research has shown that by the end of the 2000s, over 1,000 companies in the S&P 1,500 (as reported by ExecuComp) had elected a lead independent director, that lead directors tend to be powerful, experienced, and skilled, and that their presence is associated with superior monitoring and firm performance (Krause, Withers, & Semadeni, 2017; Lamoreaux, Litov, & Mauler, 2019).

Table A1 (Online Appendix) reports an exploratory logistic regression where the dependent variable takes the value of one if an independent director is a firm's lead and with fixed effects for firm-years and several control variables capturing committee membership and personal attributes such as age, number of outside board seats, and gender. Being an LTID (15 years or more of service) makes a director over twice as likely to be nominated lead. Given the association of lead directors with good governance, we suggest this result is evidence that LTIDs are associated with good governance, as well.

To summarize our analysis so far, many firms have LTIDs but usually only one of them. LTIDs tend to be highly qualified and experienced directors whom other stakeholders are willing—or even eager—to see placed in positions of influence on the board. We return to these points in developing our theoretical perspective below.

3. A THEORY OF HOW LONG-TENURED INDEPENDENT DIRECTORS ADD VALUE

There are theoretically and practically grounded reasons for believing that having a long-tenured independent director (LTID) might not help a firm and may even detract from its performance. First, practitioners express concern that directors who serve for too long may get stale or complacent (Directors & Boards, 2008; Dorsey & Whitney LLP, 2016; Papadopoulos, 2018). These concerns are in line with management scholars who speak of long-tenured executives as getting “stale in the saddle,” reducing their receptivity to new ideas or inclination to monitor (Hillman *et al.*, 2011; Katz, 1982; Miller, 1991)

[although commitment to the status quo is actually associated with industry tenure, not firm tenure (Hambrick, Geletkanycz, & Fredrickson, 1993)].

A literature using an agency lens also suggests that LTIDs may be cognitively captured by the CEO, demotivating them to monitor effectively (Hillman & Dalziel, 2003). It is intuitive that a director's social ties to the CEO would grow in their years of overlap at the same firm, and empirical research has found that social ties between the CEO and an independent director impair governance (Hwang & Kim, 2009) and ultimately reduce firm value (Fracassi & Tate, 2012).

We do not dispute that these deleterious aspects of board tenure could, in principle, be present if a board has a majority of long-serving CEO cronies, but we do not observe this situation in a material number of cases in the data for it to be of practical importance. Rather, we see between zero to two LTIDs in a firm in the majority of cases (see prior section). The implication is that firms' existing governance structures and directors themselves are generally acting to prevent the board from being dominated by a long-serving majority and are instead, some of the time, allowing one or two LTIDs to remain on the board. What is needed, then, is a theory of how a single LTID could add value. In this section, we accordingly offer a theory of why the presence of an LTID should lead to better firm performance.

How an LTID Adds Value

To begin, we note it only takes one director to report CEO misbehavior, one to suggest a new strategic alternative, one to provide tactical guidance during a restructuring or large acquisition, and so on. Though boards are deliberative bodies that make decisions democratically, a single director can affect the voting by influencing other board members during deliberation and private conversation. What starts as a minority view may, if confidently and intelligently voiced, change the opinions of other board members and embolden others who held a similar view but were hesitant to express it (Hambrick *et al.*, 2015).

In that regard, LTIDs have both highly relevant expertise and the status within the board and the firm to find an audience for their opinions, because they have more firm- and industry-specific experience with important strategic and internal managerial issues than the average board member. Likewise, an

LTID would have more familiarity with the job of serving on the firm's board (Schmidt, Hunter, & Outerbridge, 1986), as well as of the firm's history and administrative heritage, than the average board member. Moreover, although board directors may be dissuaded from challenging management or even offering candid advice for fear of social sanction (Boivie, Bednar, Aguilera, & Andrus, 2016), an LTID's tenure, knowledge, and status would lend credibility to the LTID's voice on many important decisions and insulate the LTID from these pressures (Westphal & Khanna, 2003). In general, boards function better—and have a more positive impact on firm performance—if they have a strong informal hierarchy according to which board members defer to each other's expertise, as and when relevant (He & Huang, 2011), and debate important issues vigorously but respectfully (Boivie *et al.*, 2021); the status conferred by LTIDs' long tenure thus gives them a natural leadership position within the board's informal hierarchy from which to exercise effective influence.

An LTID should be highly motivated to use this influence. One reason is that whereas agency theory envisions the ideal board director first and foremost as a socially-distant monitor of the CEO, board directors generally see themselves as intrinsically-motivated public servants who act as the CEO's strategic partners (Boivie *et al.*, 2021). We believe that LTIDs should be even more highly motivated than the average board member to act in this way for psychological reasons.

First, social identification is a psychological process in which people classify themselves into social categories (Tajfel & Turner, 1986). Organizational identification is a form of social identification, wherein a stakeholder develops an affective bond with the organization and incorporates important organizational attributes into a personal identity (Ashforth & Mael, 1989; Dutton, Dukerich, & Harquail, 1994; Zavyalova, Pfarrer, Reger, & Hubbard, 2016). The long tenure of an LTID should naturally engender stronger organizational identification with the firm (Shore, Barksdale, & Shore, 1995), leading to a high level of work motivation (Cannella Jr, Jones, & Withers, 2015; Hillman *et al.*, 2008; van Knippenberg, 2000). Second, an LTID has a well-defined social role in board deliberations as the “wise old hand,” which should tend to form the basis for a positive, competency-based self-conception, another source of work motivation (Leonard, Beauvais, & Scholl, 1999).

Additionally, what hurts the firm's reputation taints the reputation of its board members, and as a longer-serving director, an LTID is more affected (Harrison, Boivie, Sharp, & Gentry, 2018). Whereas low-identification stakeholders tend to withdraw support if an organization is under reputational threat—that is, they cut themselves loose—high-identification stakeholders, such as LTIDs, who may be too implicated to cut themselves loose easily, tend to increase their support (Zavyalova *et al.*, 2016).

All told, LTIDs have relevant expertise, motivation, and, by definition, independence, three qualities that Hambrick *et al.* (2015) identify as critical for the ideal board member.³ Moreover, important stakeholders like an LTID's colleagues on the board, shareholders, and even the CEO would seek to avoid retaining a “stale” LTID, implying that LTIDs who manifest such symptoms would not be renewed. Thus, except perhaps in firms with serious governance dysfunction (see below), LTIDs should generally be board members who have proven their worth to important stakeholders. It follows that having an LTID should be associated with better resource provision and monitoring by the board (especially on strategic issues with respect to which firm- and industry-specific experience are important) and ultimately better firm performance. We thus have the main hypothesis of the paper:

Hypothesis 1. There is a positive relationship between firm performance and the presence of an LTID.

4. MODERATING FACTORS

We now discuss factors that should make the predicted positive association between firm performance and the presence of an LTID stronger or weaker. Our aim is both to provide additional evidence in support of our theory and make progress in identifying underlying mechanisms.

Firm Complexity

Advice, such as that provided by an LTID, is intuitively more valuable to the CEO and other top managers if the firm's operations and strategic situation are inherently complex (Klein, 1998).

³ The fourth quality identified by Hambrick *et al.* (2015) is bandwidth. Although we showed that LTIDs generally have fewer outside board seats than other independent directors, we do not have enough information on the other activities of LTIDs to compare their bandwidth to that of other board members.

Complexity can undoubtedly come in many forms, but specific factors have been identified in the literature that make advice from board members more useful (Coles, Daniel, & Naveen, 2008). For example, diversified firms are by definition more complex, and empirical evidence supports this. CEOs hired by diversified firms are paid more than CEOs who are hired to undiversified firms that later diversify, suggesting a complexity premium in the CEO labor market (Rose & Shepard, 1997). Likewise, diversified firms are more expensive to audit (Hay, Knechel, & Wong, 2006) and have more outside directors and larger boards (Anderson, Bates, Bizjak, & Lemmon, 2000; Coles *et al.*, 2008), suggesting a need for more board resource provision and monitoring.

Another complexity factor is size. Larger organizations are inherently harder to manage (Williamson, 1967). Larger firms are more visible, increasing the importance of representing the firm to diverse external constituencies, a key responsibility of the CEO (Gomulya & Boeker, 2014; Pfeffer, 1983), and must manage more contracting relationships (Booth & Deli, 1996). Empirical studies also overwhelmingly find a positive association between audit cost and size (Hay *et al.*, 2006). Finally, financial leverage increases complexity because ongoing interest and principal payments reduce organizational slack, making the firm more vulnerable to adverse events.

On all these and similar matters, LTIDs' greater firm-specific experience and knowledge should make them particularly useful in resource provision and monitoring at a complex firm. Moreover, the resulting reinforcement of the LTID's social role and self-efficacy should bolster the LTID's motivation to exert effort to perform these tasks (Deci & Ryan, 1985; Leonard *et al.*, 1999). Conversely, the CEO of a less complex firm will have less need for strategic advice and be easier for stakeholders to monitor, reducing the value of an LTID's resource provision and monitoring and ultimately the LTID's motivation to provide them. We thus propose the following hypothesis:

Hypothesis 2. Complexity moderates the positive relationship between firm performance and the presence of an LTID such that the relationship will be strengthened when the firm is complex and weakened when the firm is not complex.

Firm Maturity

An independent director could offer useful advice and monitoring on diverse issues, including in technical areas like accounting, finance, or technology development, but LTIDs are notable primarily for their experience, not their specialist expertise. A director might also assist with entrepreneurial endeavors and strategic renewal by helping introduce new strategies, enter new markets, or invent new products, but an LTID is principally bringing the wisdom of experience rather than the fresh ideas of youth.

The implication is that an LTID will be most useful for firm performance if the firm is mature, i.e., if it is in the stable stage of its lifecycle (Grant, 2016). In this environment, an LTID's experience and the lessons learned therefrom are more relevant, because the factors underlying competitive success and failure are unlikely to have changed much during the LTID's tenure at the firm. Thus, the LTID can help the firm avoid repeating strategic errors made by the firm or its competitors in years past. As with firm complexity, moreover, the real and perceived competency engendered by the relevance of the LTID's experience should reinforce the LTID's social role, self-efficacy, and ultimately motivation. By contrast, the experience of an LTID may be less relevant for firms that are experiencing new environments, whether due to rapid growth from entering new industries or introducing novel products or due to rapid decline from a downturn or industry shakeout. Accordingly, if a firm is not mature, the self-reinforcing dynamic among an LTID's competence, self-conception, and motivation would be weaker:⁴

Hypothesis 3. Maturity moderates the positive relationship between firm performance and the presence of an LTID such that the relationship will be strengthened when the firm is mature and weakened when the firm is not mature.

Number of CEOs during LTID's Tenure

From a socio-psychological standpoint, one might argue that serving with fewer CEOs would allow for the formation of stronger social ties with those CEOs, leading to greater trust and ultimately greater

⁴ Maturity is not the same as firm age. Granted, new successful firms will often exhibit rapid growth and make large capital investments (Mueller, 1972; Wernerfelt, 1985), which are not characteristic of mature firms. But "sustaining innovations" at the product level that propel older firms back to the growth phase (Christensen, 1997), overlapping product portfolios of different stages in multiproduct firms, and the different stage lengths of different products mean that a given younger firm may be less mature than another given older firm (Dickinson, 2011).

resource provision by an LTID (Hillman & Dalziel, 2003; Westphal, 1999). However, stronger social ties at work can distract from organizational goals, contribute to groupthink, and create the opportunity for real or perceived favoritism (Pillemer & Rothbard, 2018), directly undermining an LTID's ability to provide effective advice, monitor, or maintain the trust of fellow board members. Indeed, as noted previously, social ties between the CEO and an independent director have been shown to impair governance (Hwang & Kim, 2009) and ultimately reduce firm value (Fracassi & Tate, 2012)

More importantly, we are arguing that an LTID adds value to a firm's board and ultimately to the firm using the knowledge gleaned and status derived from her long tenure with the firm. In some respects, the LTID's status and firm-specific knowledge may even exceed those of the current CEO, especially if the LTID has seen many CEOs come and go. Moreover, our peers at work are one of the most important sources of organizational learning (Kram & Isabella, 1985; Palmer & Blake, 2018). An LTID's knowledge will in part derive from her experience with different CEOs, each of whom will have, both in the succession process and on an ongoing basis, repeatedly had to establish expectations, identify allies and collaborators, and initiate strategic change (Ma & Seidl, 2018; Ma, Seidl, & Guérard, 2015). An LTID has experience with what does and does not work, both internally and in the competitive market, and could steer a CEO away from strategic moves that may seem advisable but, based on past experience, are likely to fail. The more CEOs with whom an LTID has worked during her tenure, the greater the number of leadership styles and strategies she will have seen implemented at her firm and thus the more valuable her experience. The institutional stability represented by an LTID who has served with many CEOs at a firm also reinforces the LTID's social role as the firm's "wise old hand." As noted previously, this should in turn strengthen the LTID's self-efficacy and ultimately work motivation.

By contrast, if an LTID has served with only a few CEOs at her firm, even only one, then her firm- and industry-specific experience may overlap significantly with that of the current CEO, making it at least partially redundant; the LTID in this case would not have experience of many different leadership styles at the firm; and the LTID would not have as clear a social role or as distinct an institutional standing vis-à-vis the CEO:

Hypothesis 4. The Number of CEOs with whom an LTID has served at a firm moderates the positive relationship between firm performance and the presence of an LTID such that the relationship will be strengthened when the firm has more CEOs during the LTID's tenure and weakened when the firm has fewer CEOs during the LTID's tenure.

Managerial Entrenchment

Entrenchment of top management is a primary concern of those who study boards with an agency lens (Fama & Jensen, 1983; Finkelstein & D'Aveni, 1994; Joseph, Ocasio, & McDonnell, 2014). If a CEO is entrenched, she has less need to focus on generating shareholder wealth and can direct the resources of the firm toward personal ends. Even a well-intentioned but entrenched CEO may take actions that are contrary to shareholder interests, which a more effective board could have prevented (Kolasinski & Li, 2013). Examples include wealth-destroying acquisitions, new product launches, or forays into distant markets where the expected returns do not justify the risk. Absent appropriate governance structures to stay the CEO's hand, an entrenched CEO may stubbornly pursue these misguided strategies in the face of criticism or shielded from criticism.

Now, one might think that the guiding hand of an LTID and the LTID's influence on other board members to speak up should be especially valuable in such situations by acting to restrain the CEO's possibly self-interested or misguided instincts. However, this perspective may be too optimistic. Unlike other CEOs, an entrenched CEO may not feel the need to listen to advice, either out of stubbornness or because the CEO's best interests may not be aligned with those of the firm.

Moreover, the argument supporting our main hypothesis that having an LTID would lead to better firm performance relies, in part, on a selection mechanism whereby LTIDs who are stale or CEO cronies are not retained. In firms where the CEO is not entrenched, this selection mechanism should typically work well, but entrenchment also implies the absence of formal procedures and by-laws to ensure that the board comprises members who are willing and able to act to control a wayward CEO or make necessary personnel changes in top management (Bebchuk, Cohen, & Ferrell, 2009). This entrenchment of the

board members themselves could not only frustrate efforts to remove LTIDs who are incompetent or too cozy with the CEO but also undermine the motivation of LTIDs who would otherwise discharge their duties with aplomb. Indeed, an LTID at a firm with an entrenched CEO may regard effective resource provision and monitoring as being hopeless endeavors, quite unlike an LTID at a firm whose CEO is not entrenched, as discussed above. It follows that the greater the entrenchment of top management, the less the presence of an LTID is likely to be associated with better firm performance:

Hypothesis 5. Entrenchment moderates the positive relationship between firm performance and the presence of an LTID such that the relationship will be weakened when the firm exhibits more entrenchment and strengthened when the firm exhibits less entrenchment.

3. METHOD

Data

Our sample is composed of the S&P 1,500 firms, excluding utilities and financial services, from 1998 to 2012. To compile our data, we combined information from commonly-used databases in governance research with extensive hand collection. Specifically, we obtained board composition and director information from RiskMetrics and BoardEx, yielding 14,740 firm-year observations for 2,137 distinct firms. We supplement this information with company financial and accounting data from Compustat.

Variable Definitions

Dependent variable. We calculate our measure of *Firm performance*, our main dependent variable, by following other recent work on board governance that has used Tobin's q for this purpose (e.g., Black, Gledson de Carvalho, & Gorga, 2012; Coles *et al.*, 2008; Dahya, Dimitrov, & McConnell, 2008). Tobin's q, i.e., the ratio of the market value of a firm's assets to their replacement value (Tobin, 1969), is a standard forward-looking measure of firm performance across the social sciences (Bertrand & Schoar, 2003; Dezső & Ross, 2012; King & Lenox, 2002) and is particularly appropriate to test our theory because it reflects the collective perspective of the market and its perception of the risk of strategic and

leadership errors that we theorize an LTID may, in part, protect against. We consider alternative measures of firm performance below.

Independent variable of interest. *LTID* is an indicator variable taking the value 1 if, in a given year, a firm has an independent director with tenure of 15 years or more. 15 years corresponds closely to the mean and median tenure of the director with the longest tenure among the firms in our data. We consider alternative thresholds and continuous measures of LTID status below.

Control variables. Firm performance and specifically Tobin's *q* have been much studied in the business disciplines and social sciences. We follow that literature by including a fairly lengthy list of control variables, but also, as described below, demonstrate our results are robust to their exclusion. Following standard practice, log transformations are used for some variables to reduce skewness, and some variables are lagged to reduce codetermination.

We control for the tenure of a firm's independent directors as a group with the standard deviation and the average of their tenure, *St. dev. ID tenure* and *Avg tenure ID*, respectively. We control for attributes of the CEO that may affect firm performance with *CEO age* and *CEO tenure* measured in years, as well as the indicator variables *CEO owns > 20%* of the firm's stock and *CEO-Chairman* (if the CEO has both positions). Other board attributes are *Board size* (number of members), *Fraction ID* (independent directors), *Busy board*, which is a dummy variable equal to 1 if 50% or more of the directors sit on 3 or more boards, *Blockholder on board*, i.e., whether a board director owns more than 5% of the firm's shares, and *Classified board*, i.e., if board terms are staggered—this is part of our measure of entrenchment (see below) and is accordingly dropped in regressions that include that measure (but it may be included without qualitatively affecting the results). Firm attributes are *Firm age* (in years, logged), *Total assets* (logged), research intensity (*RD/Sales*), lagged operating profit over assets (*EBITDA/TA (t-1)*), and the standard deviation of the firm's stock returns (*Std. dev. stock returns*).

Moderator variables. In line with our theoretical discussion above, we calculate the indicator *Complex* based on firm complexity from Coles *et al.* (2008), which, as explained in that work, is derived from a factor analysis of three observable firm attributes that make firm governance more complicated and thus

boards more useful: diversification, size, and leverage. Importantly for our purposes, Coles *et al.* (2008) provide robust evidence that *Complex* predicts a board will be larger and have more outside directors (suggesting more need for resource provision and monitoring) and can explain the relationship between board size and *Firm performance*. We define the indicator *Mature* to correspond to the so-named stage in the eight-stage firm lifecycle classification system developed by Dickinson (2011: 1969) to identify “differential behavior in the persistence and convergence patterns of profitability.” Specifically, *Mature* takes the value 1 if and only if a firm has positive cash flow from operations and negative cash flow from both investing and financing activities. *Number CEOs* is a count of how many CEOs the firm’s longest-tenured director (who may or may not be an LTID) has served with at the firm. We measure *Entrenchment* using the index created for this purpose by Bebchuk *et al.* (2009), which has been widely used in the social sciences, including recent strategy research on governance (e.g., Connelly, Li, Shi, & Lee, 2020; Connelly, Shi, & Zyung, 2017; Shi, Connelly, & E., 2017; Surroca, Aguilera, Desender, & Tribó, 2020). This index is a count of how many of the following provisions a firm has, where a higher number indicates that the firm’s management is more entrenched, because the provision makes it harder to replace them: staggered (classified) board, limitation on amending bylaws, limitation on amending the charter, supermajority to approve a merger, golden parachute, and poison pill.

Table 3 reports summary statistics and correlations for the variables in our analysis of *Firm performance*. Although some of the correlations are large in magnitude, all the independent variables had a Variance Inflation Factor under 4.2 (mean under 2), well below the suggested cutoff of 10 (Chatterjee & Hadi, 2012). Thus, multicollinearity is not a concern. (We also present a regression with no controls.)

Insert Table 3 about here

Analysis

Endogeneity is always a concern in strategy research, and it is particularly salient here, because we have explicitly theorized that the presence of an LTID is partly driven by confidence in that specific director’s

competence and motivation. For this reason, our main analysis uses an instrument for *LTID* and follows recommendations from leading econometricians in so doing. Notably, with regard to selecting a valid instrument that satisfies the exclusion restriction, we pick our “best single instrument and report just-identified estimates using this one only” to avoid weak instruments bias and because such an estimate is median-unbiased (Angrist & Pischke, 2009: 4.6.4); and we supplement this exogenous instrument with the other control variables in each regression, for they “certainly qualify as instrumental variables in their own right” (Greene, 2002: 79). Where *LTID* is interacted with moderators, we add their interaction with our instrument for *LTID* as additional exogenous instruments (Balli & Sørensen, 2013).

We argue that the age at which the longest-serving independent director was hired (*Hiring age of longest serving*) is a valid instrument for *LTID*. First, the younger a director is at hire, the more time there is before reaching retirement age. Thus, age at hire should negatively predict *LTID*. Second, *Hiring age of longest serving* should satisfy the exclusion restriction. It is not obvious why age at hire should, in and of itself, have an impact on firm performance, apart from its effect on *LTID*. Nor does it seem plausible that a firm would hire a director of a given age in anticipation of the firm’s performance many years in the future. Even so, we present regressions without instrumenting *LTID* as a robustness check.

Another issue is whether to err on the side of inclusion or parsimony in control variables. On the one hand, the more controls that are included, the more that factors other than those hypothesized can be ruled out as explanations for the results obtained. In particular, firm and other fixed effects can control for “unobservables,” which may be a source of endogeneity if they affect the dependent variable and one or more independent variables. On the other hand, a growing number of scholars have advocated for a more conservative use of (i.e., fewer) control variables (Becker, 2005; Berneth & Aguinis, 2016; Carlson & Wu, 2012; Spector & Brannick, 2011), because, inter alia, control variables can lead to spurious results and distort interpretation (Anderson, Bjarnadóttir, Dezsó, & Ross, 2019; Kalnins, 2018). Regressions with fixed effects are especially vulnerable to measurement error and reverse causality, rely for identification on a potentially small number of observations with in-panel variation (a form of selection), and can introduce biases not found in conventional OLS using the same data (Choi, 2013; Collischon & Eberl,

2020; Hill, Davis, Roos, & French, 2020; Miller, 2014). Jarosiewicz and Ross (2020) even obtain statistically and economically significant relationships using fixed effects regression on artificial data constructed not to have these relationships, suggesting that if fixed effect parameters are numerous, they may sometimes fit noise.

Finally, as a practical matter, our instrumental variable analysis is already controlling for endogeneity, and our independent variable of interest, *LTID*, is dichotomous, so using a large number of controls or fixed effects, may reduce the variation we need to estimate its effect accurately. Therefore, in our main analysis, we adopt a less parametric approach by initially presenting a bivariate OLS regression, then adding control variables, and then adding 2-digit NAICS industry and year fixed effects, all with robust standard errors. We present a regression with firm fixed effects as a robustness check.

Results

Main analysis. Table 4, Model 1 reports the second-stage regression of *Firm performance* on the instrumented *LTID*. The coefficient on *LTID* is positive ($\beta=0.129$, $p=0.014$), representing a 6.5% increase in *Firm performance* at the mean. The coefficient on *LTID* remains positive in Model 2, which adds the control variables ($\beta=1.576$, $p<0.000$), and Model 3, which adds the industry and year fixed effects to Model 2 ($\beta=0.763$, $p=0.017$). These results provide strong initial support for Hypothesis 1 from both a statistical and economic standpoint. Table 5 reports the results from the first-stage regression associated with Table 4, Model 2 (Models 1 and 3 being qualitatively similar). *Hiring age of longest-serving* has the expected negative sign ($\beta=-0.004$, $p<0.000$), and the p -values for the F -tests of underidentification and weak instruments are effectively zero, strongly rejecting that either is a problem.

Insert Tables 4 & 5 about here

Robustness. We now conduct several robustness tests in relation to our main result. First, although we believe, and statistical tests confirm, that *Hiring age of longest serving* is a strong and valid instrument for

LTID, it is worth exploring whether our result hinges on using instrumental variables analysis. In Table A2, Model 1 (Online Appendix), we repeat the analysis in Table 4, Model 3 without instrumenting *LTID*. The coefficient on *LTID* is again positive ($\beta=0.084$, $p=0.035$), supporting Hypothesis 1.

We used a 15-year threshold in determining *LTID* status because 15 years corresponds approximately to the mean and median tenure of firms' longest-serving independent directors. We do not have a strong theoretical reason to suppose that a director's expertise or motivation changes markedly at this threshold. So, to verify that our results are not sensitive to this particular cutoff, we rerun the analysis in Table 5, Model 3, using thresholds ranging from 13 to 17 years. As presented in excerpted form in Table 6, in each case, the coefficient on *LTID* is positive with a p -value under 0.02. Interestingly, both the coefficient on *LTID* and its p -value decrease steadily as the year threshold increases. This raises the possibility that an *LTID*'s positive impact on firm performance increases steadily over time (at least over a certain range) rather than manifesting "suddenly" after a certain number of years, as our dichotomous measure of *LTID* status implies; in addition, as noted previously, although firm fixed effects may be problematic in some ways, they do control for time invariant unobservable characteristics at the firm level. To address both issues, in Table 2A, Model 2 (Online Appendix), we present a regression in which we (a) measure *LTID* status using the tenure in years of the longest-serving independent director and this tenure squared and (b) include firm fixed effects. The coefficient on the linear term is positive ($\beta=0.117$, $p=0.011$) and the coefficient on the square term is negative ($\beta=-0.002$, $p=0.012$) and of a magnitude such that the effect of an additional year of an *LTID*'s tenure on firm performance is increasing but at a decreasing rate within the design of the data. Thus, this result again provides strong support for Hypothesis 1, albeit with a slightly different interpretation.

Insert Table 6 about here

We have focused on Tobin's q because we believe, as a forward-looking, comprehensive measure of firm performance that incorporates risk, it is the best measure for our purposes. Nonetheless, it is

worthwhile to consider other measures of firm performance. Bartlett and Partnoy (2018) argue that the denominator of Tobin's q is hard to measure accurately, so scholars should consider firm market value instead (i.e., the numerator of Tobin's q). We accordingly repeat the analysis from Table 4, Model 3 but with (winsorized) Firm Market Value (market value of equity and debt) as the dependent variable in Table 3A, Model 1 (Online Appendix). The coefficient on *LTID* is positive ($\beta=20,056, p<0.000$), again supporting Hypothesis 1. (Using the log of market value yields qualitatively similar results.)

Although accounting measures of performance are backward looking and do not incorporate risk, there may be interest in how they are influenced by having an *LTID*. Table 3A, Model 2 (Online Appendix) repeats the analysis from Table 5, Model 3 but uses Return on Assets (net income over assets) as the dependent variable. Once again, the coefficient on *LTID* is positive ($\beta=0.126, p<0.000$), supporting Hypothesis 1. (This regression omits *EBITDA/TA* ($t-1$) because it is arguably too similar to the dependent variable, but this variable may be included without qualitatively changing the results.)

Moderators. Table 4, Model 4 presents a fully-saturated regression with moderators. To assess our moderation hypotheses, we evaluate the sign and significance of each moderator and how it affects the marginal effect of *LTID* across a range of each moderator's values (Busenbark, Graffin, Campbell, & Lee, 2021), as depicted in Figure 2. The simple effect of *Complex* is negative ($\beta=-0.245, p<0.000$), perhaps because it incorporates diversification, which is sometimes associated with worse performance. The interaction between *Complex* and *LTID* is positive ($\beta=0.245, p=0.005$) and, as depicted in Figure 2, Panel A, the marginal effect of *LTID* is stronger when *Complex* is 1 than when it is 0, as predicted by Hypothesis 2. The simple effect of *Mature* is also negative ($\beta=-0.221, p<0.000$), which is intuitive because mature firms have fewer profitable investment opportunities. The interaction between *Mature* and *LTID* is positive ($\beta=0.246, p=0.007$) and, as depicted in Figure 2, Panel B, the marginal effect of *LTID* is stronger when *Mature* is 1 than when it is 0, as predicted by Hypothesis 3.

The simple effect of *Number CEOs* is negative ($\beta=-0.102, p<0.000$), perhaps because frequent CEO turnover is associated with poor performance (Jenter & Lewellen, 2021). The interaction between

Number CEOs and *LTID* is positive ($\beta=0.096$, $p=0.031$) and, as depicted in Figure 2, Panel C, the marginal effect of *LTID* is increasing in *Number CEOs*, as predicted by Hypothesis 4. The simple effect of *Entrenchment* is negative but near zero ($\beta=-0.004$, $p=0.818$). The interaction between *Entrenchment* and *LTID* is negative ($\beta=-0.154$, $p<0.000$), and, as depicted in Figure 2, Panel D, the marginal effect of *LTID* is decreasing in *Entrenchment*, as predicted by Hypothesis 5.

Insert Figure 2 about here

It is worthwhile revisiting Hypothesis 1 in view of the fully saturated model (Edwards, 2009). The simple effect of *LTID* is positive ($\beta=0.832$, $p=0.057$); this is similar to its magnitude and statistical significance at the grand mean of the data. (See Figure 2, Panel C, where *Number CEOs* equals its approximate mean of 2, the other variables are at their means, and the 95% confidence interval barely crosses zero.) The marginal effect of *LTID* does reach a minimum of about -0.25 where *Complexity* = *Mature* = 0, *Entrenchment* = 6, and *Number CEOs* = 1, but even here, about a third of the 95% confidence interval lies above zero. In summary, having an LTID does generally improve firm performance, in line with Hypothesis 1, but not always: an LTID does not appear to meaningfully affect firm performance in the region of the data where *Complexity*, *Mature*, and *Number CEOs* are low and *Entrenchment* is high.

5. POST HOC ANALYSIS

Event study of director deaths. We believe our instrumental variables analysis goes a long way toward establishing a causal relationship between the presence of an LTID and better firm performance. To further establish this causal link, we undertake an event study of the deaths of directors, which are largely unanticipated, at least with regard to their exact timing. Therefore, the market's reaction to them can be interpreted as a natural experiment regarding their effect on firm value, which can be interpreted causally.

We identified 23 deaths of a firm's longest-tenured independent director in our data by manually inspecting news reports and other documents. We computed a 150-day market model for the stock price

of each such director's firm ending 15 days before the death and used the market model to calculate cumulative abnormal returns (CAR) from 3 days prior to 3 days after the death. We then use these CAR as a dependent variable in a regression on *LTID* and the log of the *Director age* in years. (*Director age* is mean centered to aid in interpretation.) As depicted in Table 7, the average CAR is close to zero (see constant term, $\beta=0.016$ $p=0.268$) and the coefficient on *LTID* is negative ($\beta=-0.061$, $p=0.024$), implying a greater adverse market reaction. (Qualitatively similar results are obtained if *Director age* is dropped or using a continuous measure of *LTID* status.) Thus, the market reaction to director deaths provides more causal evidence for our theory that LTIDs improve firm performance.

Insert Table 7 about here

Adverse actions by shareholders. We have theorized and presented evidence that the presence of an LTID leads to better firm governance and ultimately better firm performance. To more directly examine whether better governance underlies our results, we now undertake an examination of whether the presence of an LTID is associated with a lower incidence of two important classes of adverse action by shareholders that strongly imply, and in some cases directly express, a lack of confidence in the governance of the firm, including by the board of directors: shareholder class action lawsuits (SCAS) and shareholder activist motions (SAM).

Boards play an important role in preventing—and have a fiduciary duty to prevent—misbehavior by top management that can lead to SCAS and SAM (Amoah & Tang, 2010; Zahra, Priem, & Rasheed, 2005). Indeed, much SAM seeks to improve board functioning (e.g., by increasing its independence) (Ertimur, Ferri, & Muslu, 2011; Goranova & Ryan, 2014; Klein & Zur, 2009) and SCAS often leads to similar board changes (Cheng, Huang, Li, & Lobo, 2010; Ferris, Jandik, Lawless, & Makhija, 2007).

Beyond their fiduciary duty, LTIDs and other directors may be adversely targeted by SAM and may be named in SCAS. Although they are not found liable that frequently, they may experience significant costs in terms of “time, aggravation, and potential harm to reputation” (Black, Cheffins, &

Klausner, 2006: 1056) as measured by recommendations by Institutional Shareholder Services and negative votes from shareholders (Brochet & Srinivasan, 2014). The economic impact of SCAS is also significant, with average damages of almost \$1 billion (Cornerstone Research, 2016).

Thus, LTIDs should be highly motivated to act to forestall SCAS and SAM. It follows that if the presence of an LTID improves firm performance in large part by improving the functioning of the board, then the LTID's presence should be associated with a lower likelihood of the firm experiencing an SCAS or SAM. We test this twofold proposition with data on class action lawsuits filed against U.S.-listed companies from the Stanford Security Class Action Clearinghouse and on activist motions from Capital IQ from 2002 (the start date in Capital IQ) to 2012.

We define *SCAS* as an indicator variable for whether a firm faces a shareholder class action lawsuit in a given year. We have 337 such cases in our sample. *SAM* is an indicator variable for the following shareholder activist motion codes in the Capital IQ data: Activist Request / Demands Target, Activist Letter to Target, Communication to Employees by Target, Declaration of Voting Results - 10Q / 13D / Any SEC form, Confidentiality Agreement, Nomination Agreement, and Supporting Statement to Target by Third Party. We have 213 such events in our sample.

For shareholder lawsuits, we derive our control variables from prior work (e.g., Banerjee, Humphrey-Jenner, Nanda, & Tham, 2018; Francis, Philbrick, & Schipper, 1994; Gande & Lewis, 2009; Kim & Skinner, 2012): *Total assets* (lagged), *Firm performance* (lagged), and *Std. dev. stock returns* (lagged) defined above, as well as year-on-year *Sales growth* (lagged), daily *Stock returns* (lagged), skewness of stock returns (*Skew. stock returns*, lagged), being in one of the *Risk industries* (biotechnology, computers, electronics, and retail), which research suggests are more prone to shareholder lawsuits (Francis *et al.*, 1994; Kim & Skinner, 2012), and year fixed effects. For shareholder activist actions, there is no clear precedent in the literature, so we use the control variables in Table 5, Model 2 but add lagged *Firm performance* (since poor performance likely prompts shareholder activist motions) and year fixed effects. We run the same econometric specification as in Table 5: a linear probability model with *SCAS* or *SAM* as the dependent variable and instrumenting *LTID* with *Hiring age of longest*

serving. We bootstrap standard errors and multiply coefficients by 100, so they can be interpreted in percentage terms.

Table 8 reports the results for shareholder class action lawsuits. The coefficient on *LTID* is negative ($\beta=-22.000, p<0.000$), suggesting that LTIDs do indeed make these lawsuits less likely. Table 9 reports the results for shareholder activist motions. Again, the coefficient on *LTID* is negative ($\beta=-1.830, p=0.049$), suggesting that LTIDs make activist motions less likely, as well. Thus, support was obtained for both post hoc hypotheses.

Insert Tables 8 & 9 about here

6. DISCUSSION

We investigated a little known and poorly understood—yet nonetheless widespread—phenomenon in corporate governance, that many firms have a long-tenured independent director. We first examined the basic characteristics of these LTIDs and the firms on whose boards they serve. Boards with an LTID actually exhibit somewhat less entrenchment. Meanwhile, LTIDs typically serve during the tenure of more than one CEO and tend to have sat on more board seats than other directors early in their careers before focusing on a small number of firms later. Vis-à-vis other directors, moreover, LTIDs are about six years older, are more likely to be lead directors, and generally have greater educational attainment. An implication is that LTIDs are not cronies of the CEO, helping the CEO avoid accountability. Rather, LTIDs are especially capable and may possess deep firm-specific knowledge.

Based on this, we developed a theory of how LTIDs add value to firms. Our theory argues that not only are LTIDs capable and highly familiar with the firms on whose boards they serve, they also have the institutional standing and motivation to offer candid advice to top management, monitor them, and successfully influence other board members when needed. It follows that firm performance should be better if the firm has an LTID. That is what we found using a number of different measures of firm performance and econometric specifications. We also found that the positive impact of an LTID on firm

performance is larger if a firm is complex or mature and the LTID has served with a greater number of CEOs at the firm, but that an LTID has lower impact—even none—if senior management is sufficiently entrenched. Our regressions used instrumental variables analysis, suggesting a causal relation between the presence of an LTID and firm performance. We found additional causal evidence of the LTID's impact on firm performance in a post hoc event study of director deaths. Finally, we found that the presence of an LTID is associated with a lower probability of shareholder class action lawsuits and activist motions against the firm, both of which have been associated with a desire to improve firm governance.

From a theoretical standpoint, our paper is one of the few forays into theoretically and empirically exploring how the *individual* characteristics of each board director matter, as opposed to aggregate statistics about the board. We note that although our results can be reconciled with agency theory, they do contradict the agency-based perspective that long tenure of board directors necessarily leads to cronyism with the top management team. In fact, it may be that long tenure itself is what enables a director to stand up to an otherwise powerful CEO. All told, our research adds to the growing body of evidence that agency considerations, though important, are only one force determining firm governance.

From a practical standpoint, in a recent paper, Boivie *et al.* (2016: 30) offered the following lament: “Over the past 20 years, there has been a tremendous amount of research on corporate governance, and yet it is still difficult to find solid prescriptions for effective boards.” Our paper offers a clear and solid prescription for a more effective board: Firms should cultivate and retain an LTID to improve firm performance; in fact, we found that firm performance as measured by Tobin's Q was 6.5% higher with an LTID than without and that whereas the death of directors does not generally elicit a negative market reaction, the death of an LTID was associated with a 6.1% drop in the firm's stock price.

It is thus perhaps surprising that only about half the firms in our data have an LTID, most often only one or two. Indeed, some practitioners and regulators have recently expressed concern over long board tenures, even to the extent of seeking and in a few cases mandating term limits.⁵ We would suggest

⁵ Only 5% of the S&P 500 firms have term limits for independent directors (SpencerStuart, 2019), and conversations with Equilar, a compensation and board data vendor, and other practitioners suggest the percentage was even lower

that these concerns should be directed at boards that have a preponderance of long-serving directors. Rather, shareholders, especially blockholders with the ability to influence board composition, should consider that maintaining an LTID may be an excellent way to protect their interests, while also ensuring that the board also has newer board members, who may bring fresh ideas.⁶ We found that older firms and those with larger boards are more likely to have an LTID, perhaps for mechanistic reasons. We also found that directors who were hired at a young age, have high educational attainment, and served on many boards are more likely to become LTIDs; regardless of its age or the size of its board, a firm can cultivate directors with these attributes in the hope that one or two of them become high-value LTIDs someday.

That being said, our study has limitations that could represent fruitful opportunities for future research. We examined only one attribute of one director, whether the longest-tenured has tenure longer than a particular threshold. There is clearly a large opportunity for more research examining other attributes of other directors and how these attributes aggregate in more complex ways than the average or a dispersion about the average. There is also room to consider other contingencies that moderate the effect of having an LTID on firm performance. In particular, are there situations where having an LTID could *worsen* firm performance? We suspect not, because the other board members could engage in resource provision and monitoring in situations where the LTID is less useful, but this remains to be established.

Although we offered empirical tests that, we argue, do suggest a causal relationship between the presence of an LTID and firm performance, we do not directly observe boards or their directors. Thus, we can only speculate about the behaviors that ultimately drive the relationship between the presence of an LTID and firm performance. Anthropological research methods and controlled experiments could play an important role in developing a more fine-grained understanding of the mechanisms underlying our results.

during our sample period and in the larger universe of S&P 1,500 firms we study. Equilar provided us with their earliest year of term limit data (2015) on the S&P 1,500. We reran our analyses after dropping every firm listed therein as having a term limit, on the theory that this list was a superset (or close to one) of the firms that ever had term limits in our sample period. The results did not qualitatively change.

⁶ Netflix may be an example of a company attending to board tenure diversity in this way, for the company's 2020 proxy statement reads on page 6 above a graph showing that the board is roughly evenly divided between those with less than 5, more than 10, and between 5 and 10 years of tenure: "Board balances fresh thinking, new perspectives, and emerging skill needs with institutional knowledge and stability."

We studied the phenomenon of the long-tenured independent director, showing that it is associated with better firm performance and protects against adverse shareholder actions. We hope our results and theory will motivate additional research on the attributes of individual board members.

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Table 1 – Comparison of boards with and without long-tenured directors

	LTID-firms	Non-LTID firms	<i>t</i> -stat difference
Average board size	9.62	8.56	29.31
Average # of independent directors	7.01	6.00	28.32
Average # of gray directors	0.94	0.94	0.13
Average independent directors age	62.51	60.00	35.08
Average independent directors tenure (excluding LT)	5.76	5.49	8.12
Average CEO Tenure	8.14	6.59	12.16
<i>All firms</i>			
% of LTID firms	50.78%		
Mean (Median) number of LTID	0.90 (1)		
% of firms with LTID (N=1)	25.78%		
% of firms with LTID (N=2)	15.14%		
Average (Max) # CEOs in tenure of longest-serving LTID	1.94 (7)		

Table 2 – Comparison of long-tenured directors and non-long-tenured directors

	LTIDs	Non-LTIDs	<i>t</i> -stat difference
Ivy League Diploma	0.402	0.314	13.20
Business School	0.419	0.474	-8.05
PhD	0.057	0.041	5.11
Medical School	0.000	0.000	-4.12
Law School	0.183	0.106	14.82
Other Graduate Degree	0.141	0.184	-8.91
Chartered Financial Analyst	0.012	0.008	2.76
Certified Public Accountant	0.059	0.119	-17.44
Director Network	452.6	633.0	-26.36

Table 3 – Descriptive statistics and correlations

	Mean	Std. Dev.	1	2	3	4	5	6	7	8	9	10	11
1. <i>LTID</i>	0.51	0.50											
2. <i>Firm performance</i>	1.98	1.29	-0.06										
3. <i>Complex</i>	0.50	0.50	0.13	-0.08									
4. <i>Mature</i>	0.56	0.50	-0.02	-0.02	0.13								
5. <i>Number CEOs</i>	1.94	0.98	0.15	-0.11	0.16	0.08							
6. <i>Entrenched</i>	2.36	1.36	0.04	-0.14	0.04	0.17	-0.02						
7. <i>St. dev. ID tenure</i>	5.47	3.08	0.71	-0.06	0.06	0.05	0.10	0.00					
8. <i>Avg. tenure ID</i>	10.21	7.83	0.17	-0.02	-0.09	0.02	-0.36	-0.09	0.23				
9. <i>CEO age</i>	55.92	7.39	0.14	-0.11	0.06	0.05	-0.13	-0.01	0.15	0.35			
10. <i>CEO owns</i> >=20%	0.04	0.19	0.01	-0.03	-0.06	0.01	-0.14	-0.12	0.03	0.21	0.16		
11. <i>CEO chairman</i>	0.60	0.49	0.02	-0.01	0.12	0.01	-0.23	0.04	-0.01	0.12	0.26	0.11	
12. <i>CEO tenure</i>	10.58	9.30	0.17	-0.02	-0.08	0.01	-0.44	-0.11	0.23	0.81	0.50	0.31	0.31
13. <i>Fraction ID</i>	0.71	0.15	0.09	-0.05	0.13	0.06	0.21	0.22	-0.05	-0.20	-0.02	-0.20	0.07
14. <i>Busy board</i>	0.02	0.15	0.01	0.03	0.08	0.01	0.00	-0.01	-0.01	-0.05	0.00	0.00	0.05
15. <i>Blockholder on board</i>	0.10	0.31	0.00	-0.01	-0.04	0.02	0.00	-0.08	0.04	-0.01	-0.03	0.07	-0.10
16. <i>Board size</i>	9.10	2.26	0.23	-0.09	0.48	0.13	0.19	0.08	0.16	-0.11	0.07	-0.08	0.04
17. <i>Classified board</i>	0.56	0.50	-0.02	-0.04	-0.01	-0.01	-0.01	0.59	-0.01	-0.02	-0.03	-0.02	0.05
18. <i>Firm age</i>	3.14	0.64	0.43	-0.19	0.33	0.16	0.33	0.10	0.39	0.05	0.16	-0.04	0.08
19. <i>Total assets</i>	7.51	1.50	0.15	-0.06	0.72	0.11	0.20	-0.02	0.06	-0.11	0.06	-0.11	0.13
20. <i>RD/sales</i>	0.08	2.01	-0.02	0.03	-0.03	-0.02	0.00	-0.01	-0.01	-0.01	-0.02	-0.01	0.00
21. <i>EBITDA/TA (t-1)</i>	0.16	0.10	0.01	0.49	0.07	0.15	-0.08	-0.05	0.01	0.02	-0.03	0.00	0.02
22. <i>St. dev. stock returns</i>	0.03	0.01	-0.13	0.07	-0.26	-0.19	-0.11	0.01	-0.10	-0.02	-0.11	0.01	-0.05

Table 3 – (cont'd)

	12	13	14	15	16	17	18	19	20	21
13. <i>Fraction ID</i>	-0.24									
14. <i>Busy board</i>	-0.04	0.02								
15. <i>Blockholder on board</i>	-0.02	-0.20	-0.03							
16. <i>Board size</i>	-0.07	0.06	0.05	0.06						
17. <i>Classified board</i>	-0.02	0.01	0.00	-0.03	0.06					
18. <i>Firm age</i>	0.04	0.18	0.04	-0.03	0.39	-0.04				
19. <i>Total assets</i>	-0.10	0.19	0.10	-0.09	0.57	-0.08	0.39			
20. <i>RD/sales</i>	-0.01	-0.01	0.00	0.03	-0.02	-0.01	-0.03	-0.04		
21. <i>EBITDA/TA (t-1)</i>	0.02	-0.02	0.02	0.00	0.04	-0.01	-0.04	0.06	-0.05	
22. <i>St. dev. stock returns</i>	-0.01	-0.13	-0.01	0.01	-0.26	-0.02	-0.28	-0.33	0.06	-0.26

N = 14,740

Table 4 – LTIDs and firm performance (page 1 of 2)

Dependent variable	Firm performance			
Method	IV			
	(1)	(2)	(3)	(4)
<i>LTID</i>	0.129 (0.014)	1.576 (0.000)	0.763 (0.017)	0.832 (0.057)
<i>Complex</i>				-0.245 (0.000)
<i>Complex x LTID</i>				0.247 (0.005)
<i>Mature</i>				-0.221 (0.000)
<i>Mature x LTID</i>				0.246 (0.007)
<i>Number CEOs</i>				-0.102 (0.000)
<i>Number CEOs x LTID</i>				0.096 (0.031)
<i>Entrenchment</i>				-0.004 (0.818)
<i>Entrenchment x LTID</i>				-0.154 (0.000)
<i>St. dev. ID tenure</i>		-0.162 (0.000)	-0.076 (0.026)	-0.092 (0.012)
<i>Avg. tenure ID</i>		-0.004 (0.043)	0.000 (0.960)	0.000 (0.936)
<i>CEO age</i>		-0.013 (0.000)	-0.011 (0.000)	-0.009 (0.000)
<i>CEO owns>20%</i>		-0.243 (0.000)	-0.200 (0.000)	-0.283 (0.000)
<i>CEO chairman</i>		0.028 (0.222)	-0.006 (0.787)	-0.019 (0.424)
<i>CEO tenure</i>		0.002 (0.363)	0.002 (0.211)	-0.001 (0.689)
<i>Fraction ID</i>		-0.551 (0.000)	-0.063 (0.624)	-0.059 (0.660)
<i>Busy board</i>		0.206 (0.009)	0.129 (0.080)	0.137 (0.070)
<i>Blockholder on board</i>		-0.045 (0.180)	-0.062 (0.039)	-0.081 (0.014)
<i>Board size</i>		-0.047 (0.000)	-0.037 (0.000)	-0.034 (0.000)
<i>Classified board</i>		-0.098 (0.000)	-0.110 (0.000)	
<i>Firm age</i>		-0.380 (0.000)	-0.279 (0.000)	-0.233 (0.000)
<i>Total assets</i>		0.012 (0.238)	0.040 (0.000)	0.070 (0.000)
<i>RD/sales</i>		0.026 (0.230)	0.021 (0.263)	0.016 (0.250)
<i>EBITDA/TA (t-1)</i>		6.609 (0.000)	6.864 (0.000)	7.162 (0.000)
<i>Std. dev. stock returns</i>		15.480 (0.000)	20.890 (0.000)	22.710 (0.000)

Table 4 – LTIDs and firm performance (page 2 of 2)

<i>Constant</i>	1.918 (0.000)	3.317 (0.000)	2.198 (0.000)	1.885 (0.000)
Industry Fixed Effects	N	N	Y	Y
Year Fixed Effects	N	N	Y	Y
Observations	14,740	14,740	14,733	12,862

p-values in parentheses under coefficients based on robust standard errors.

Table 5 – LTIDs and firm performance: First stage regression (Table 5, Model 2)

Dependent variable	LTID
Method	OLS
<i>Hiring age of longest serving</i>	-0.004 (0.000)
<i>St. dev. ID tenure</i>	0.099 (0.000)
<i>Avg. tenure ID</i>	0.002 (0.009)
<i>CEO age</i>	0.000 (0.993)
<i>CEO owns>20%</i>	0.039 (0.009)
<i>CEO chairman</i>	-0.006 (0.362)
<i>CEO tenure</i>	0.001 (0.039)
<i>Fraction ID</i>	0.329 (0.000)
<i>Busy board</i>	0.020 (0.249)
<i>Blockholder on board</i>	-0.009 (0.349)
<i>Board size</i>	0.018 (0.000)
<i>Classified board</i>	-0.009 (0.101)
<i>Firm age</i>	0.096 (0.000)
<i>Total assets</i>	0.002 (0.308)
<i>RD/sales</i>	0.000 (0.758)
<i>EBITDA/TA (t-1)</i>	0.026 (0.353)
<i>Std. dev. stock returns</i>	0.063 (0.786)
<i>Constant</i>	-0.585 (0.000)
Observations	14,740

p-values in parentheses under coefficients based on robust standard errors.

Table 6 – Alternative tenure thresholds for determining LTID status (excerpted)

Dependent variable	Firm performance				
Method	IV				
Tenure threshold (years)	13	14	15	16	17
<i>LTID</i>	1.007 (0.019)	0.879 (0.018)	0.763 (0.017)	0.678 (0.017)	0.618 (0.017)

p-values in parentheses under coefficients based on robust standard errors.

Table 7 – Event study of director deaths

Dependent Variable	Cumulative Abnormal Return
<i>LTID</i>	-0.061 (0.024)
<i>Director age</i>	-0.244 (0.029)
<i>Constant</i>	0.016 (0.268)
<i>F</i> -stat	3.66
<i>R</i> ²	0.26
Observations	23

p-values in parentheses under coefficients. *Director age* is mean-centered to ease interpretation.

Table 8 – LTIDs and security class actions lawsuits

Method	IV
Dependent variable	SCAS
<i>LTID</i>	-22.000 (0.000)
<i>Total assets (t-1)</i>	0.944 (0.000)
<i>Risk industries</i>	1.300 (0.001)
<i>Firm performance (t-1)</i>	0.284 (0.000)
<i>Sales growth (t-1)</i>	5.450 (0.000)
<i>Stock returns</i>	-0.347 (0.322)
<i>Std. dev. stock returns</i>	98.100 (0.000)
<i>Skew. stock returns</i>	-0.068 (0.697)
<i>Constant</i>	2.750 (0.052)
Year Fixed Effects	Y
Observations	14,521

p-values in parentheses under coefficients based on bootstrapped standard errors. Coefficients multiplied by 100 to improve readability.

Table 9 – LTIDs and shareholder activist motions

Method	IV
Dependent variable	SAM
<i>LTID</i>	-1.830 (0.049)
<i>St. dev. ID tenure</i>	0.195 (0.006)
<i>Avg. tenure ID</i>	-0.498 (0.103)
<i>CEO age</i>	0.006 (0.772)
<i>CEO owns > 20%</i>	-0.366 (0.653)
<i>CEO chairman</i>	-0.439 (0.153)
<i>CEO tenure</i>	0.519 (0.087)
<i>Fraction ID</i>	1.600 (0.159)
<i>Blockholder on board</i>	0.260 (0.582)
<i>Busy board</i>	0.709 (0.535)
<i>Board size</i>	0.111 (0.168)
<i>Classified board</i>	-0.379 (0.162)
<i>Firm age</i>	0.293 (0.267)
<i>Total assets</i>	-0.074 (0.535)
<i>RD/sales</i>	-0.401 (0.490)
<i>EBITDA/TA (t-1)</i>	-6.850 (0.000)
<i>Std. dev. stock returns</i>	-1.740 (0.909)
<i>Firm performance (t-1)</i>	-0.404 (0.008)
<i>Constant</i>	3.570 (0.061)
Year Fixed Effects	Y
Observations	10,936

p-values in parentheses under coefficients based on bootstrapped standard errors. Coefficients multiplied by 100 to improve readability.

Figure 1 – Comparison of outside boards seats held by LTIDs and non-LTIDs

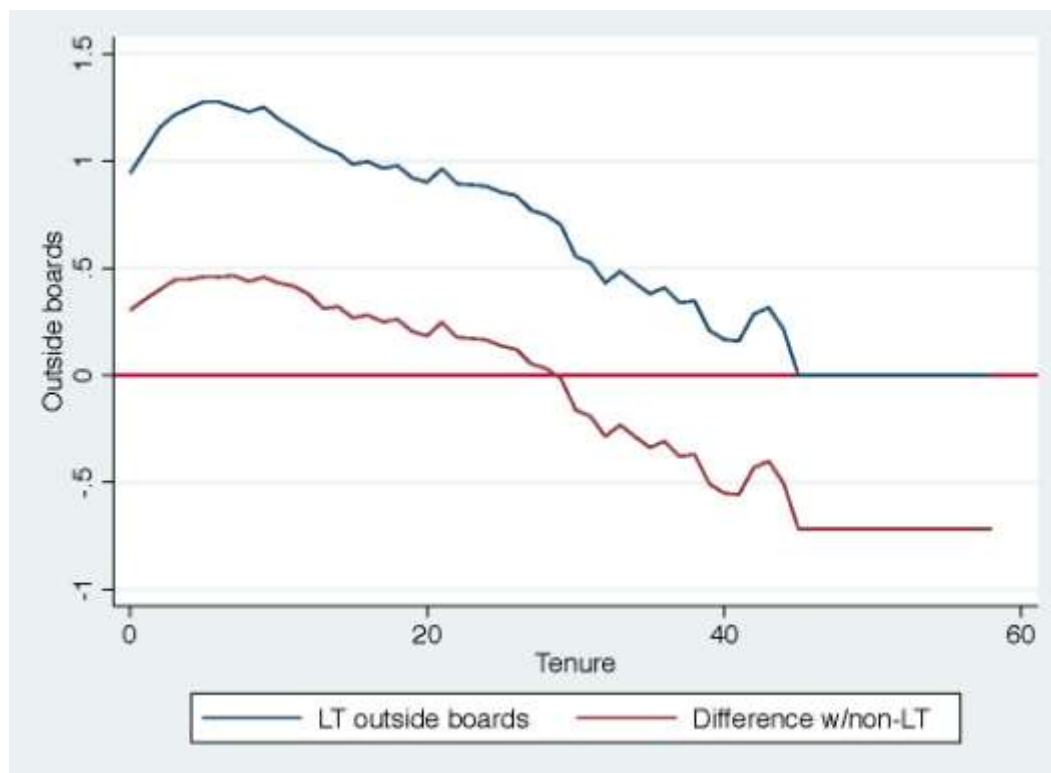
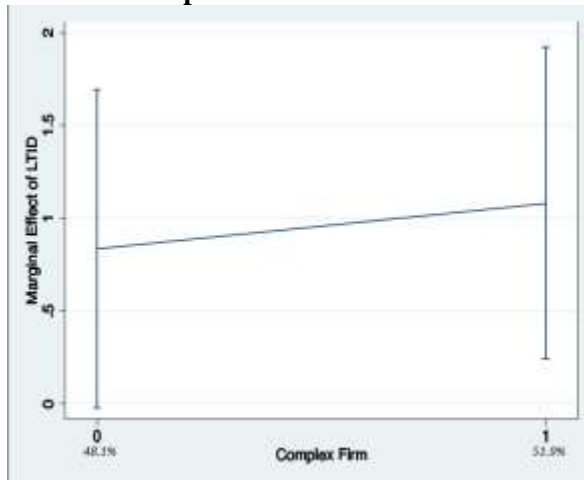
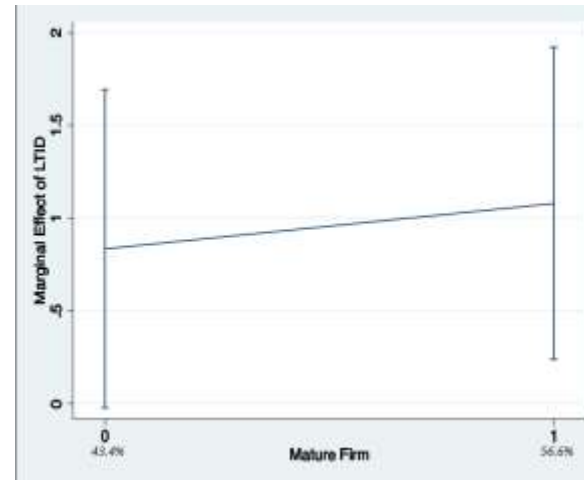


Figure 2 – Moderators of the effect of an LTID on Firm performance

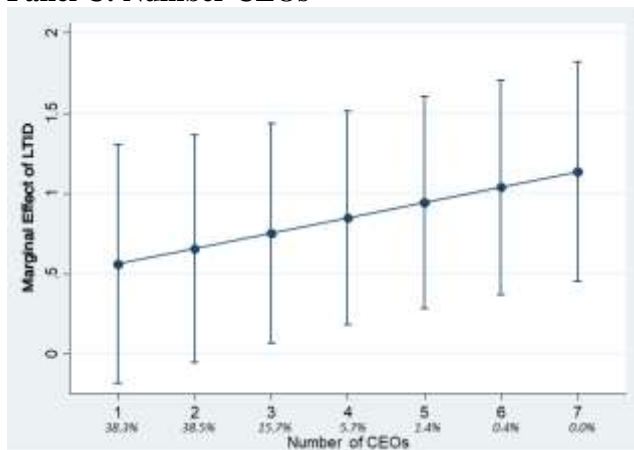
Panel A: Complex



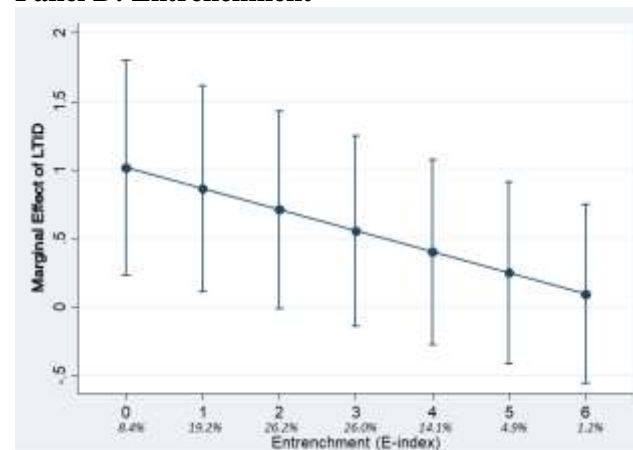
Panel B: Mature



Panel C: Number CEOs



Panel D: Entrenchment



Note: Error bars represent 95% confidence intervals. Numbers in italics represent frequencies. Other variables take their mean values.